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THE MEDITERRANEAN SEA

PREFACE

We, the Turkish Marine Research Foundation (TÜDAV), organized the second international symposium on seas, namely "The International Symposium on the Problems of Regional Seas". When we organized the International Symposium on the Aegean Sea in Bodrum last year, we realized that a meeting with broader perspectives can be useful to understand the problems of the seas around Turkey.

Facing the Black Sea, Turkish Straits System, Aegean Sea and Mediterranean Sea, Turkey is a real peninsula. All these regional seas, as well as the Caspian Sea, are closely related to Turkey's policies, economy, and environmental problems. These are important for peace and development of all riparian countries, not only for Turkey .

Each sea has distinct characteristics. The Caspian Sea, actually a lake, is attracting attention as a rich oil bed. The Black Sea is undoubtedly one of the most seriously polluted seas in the world. The Turkish Straits System, connecting the Black Sea and the Mediterranean, is also suffering from various human activities, especially heavy marine traffic. The Aegean Sea disputes are some of the most critical issues between Turkey and Greece. The Mediterranean Sea, under great ecological stress, has the oldest convention for its protection, from which all of us can learn something about governing a regional sea.

The aim of this symposium is, first of all, to exchange information between scientists, experts, and decision makers from different countries. Next,we can discuss how we can contribute to the peace, protection and development of the regional seas. Needless to say, international cooperation is needed as water bodies do not recognize borders…

As an NGO, we are very happy to serve as a facilitator for this meeting of respected scientists and experts. We hope this symposium can shed some light to new approaches to solve the problems of regional seas.

Last but not least, we thank the following organizations for their kind support: Strategic Research Committee, Ataköy Marina, BP Turkey, Chamber of Shipping, and Piramit Advertising. Special thanks are also due to Mr. Sedat Altunay of Ataköy Marina and Dr . Sibel Sezer for their continuous support and to Dr. Ayaka Amaha Öztürk for her help in editoring this volume.

Bayram Öztürk
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CASPIAN SEA LEVEL AND ECOLOGICAL PROBLEMS

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ABSTRACT

At present time two main problems for the Caspian Sea are: level fluctuations and its ecological condition. The peculiarities of fluctuations of the Caspian Sea level during ecological and historical periods are considered and period instrumental overviews. The reasons of level fluctuations are determined, are given long-term forecast, ecological and socio-economical consequences from last rising of the Caspian Sea level are analyzed. Viewing ecological conditions of the Caspian Sea are given classification of the main sources of sea pollution and areas of their transgression.

INTRODUCTION

The most characteristic feature of the Caspian Sea is periodic fluctuations in its level, which is different from other large lakes of the planet. Depending on the sea level, which at the present time is 27,03 m below of the World Ocean level, area and available volume of the Caspian Sea change. Among multitude problems the main ones are: the fluctuations of the Caspian Sea level and its ecological situation.

In the past, unexpected transgressions and regressions of the level had an influence on the fate of the whole ethnos. According to GUMILEV (1980), one of the factors which undermined the power of the ancient Khazar state (which was located in the north-west part of the Caspian Sea coast) was sudden transgression of the Caspian in X B.C., which flooded the great part of pastures in the northern Pre-Caspian region.

In the 1950s and 1960s, whenever there was a drop in the level, the slogan "Caspian should be saved" reigned supreme. In 1990 during a rise in the level of water in the sea, protective measures were carried out under the slogan "We must be saved from the Caspian".

MATERIALS and METHODS

For studying peculiarities and reasons of the sea level fluctuations were used geological, historical and archeological data, and also shooting location Baku measurements post materials. For carrying out long-term forecast on the Caspian Sea level was used special mathematics apparate. Ecological situation of the Caspian Sea, and its coastal zone were determined on the base of authorities materials on the natural protection and author's own investigations.

RESULTS and DISCUSSION

Peculairities of the variability of the Caspian Sea level. On the term cycle the variability of the Caspian Sea level can be classified as: geological and historical periods of variability, yearly and seasonal changeabilities and short-term fluctuations.

Geological period. In terms of geographical time, it has been established fairly accurately that the lowest levels were observed in the time immediately prior to the Neo-Caspian, the Pre-Chvalin, the Pre-Khazar and especially in the Pre-Baku epoch (over 500 000 years ago) when the level of the was recorded at an absolute level of +150 m. The times when the level was at its lowest were crucial moments in the evolution of the Caspian Basin, since each rise in level following on: from a period with a low level was characterised by its own specific features. It was established that the scale of fluctuation of the Caspian during the fourth period totalled approximately 300 m, (RICAGOV, 1992; FEDOROV, 1956). It was established that in the Quartanary period of the Caspian Sea through Kuma-Manich Hollow was connected with the Azov and Black Seas.

Historical period. Archeological research of the Caspian and region determination of the absolute age of sedimentary deposits in the Caspian by radiocarbon dating, as well as reliable and unambiguous data interpreted from historical sources, have allowed to calculate the level of the Caspian Sea during various centuries of the last 3,000 years (MAMEDOV, 1995).

As seen from Fig.1 in historical period the average secular level location was nearly – 27.0 m, that is near present value. The secular its tendention could change from 0.4 m in century (from VI c. b.n.e. to VII c. n.e) to +0.3 m (from VIII c. n.e. to present time). In historical time most frequency of level staing (near 40%) was typical in diaposon of marks from – 25.0m to –27.0m and main diaposon of changing (near 70%) was from –24.0m to –30.0m, the amplitude of the level fluctuation equaled 16m.

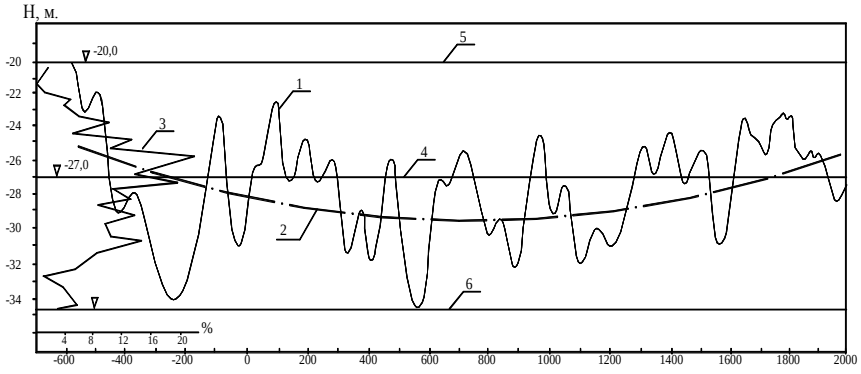

Fig.1 Variability of the Caspian Sea level for historical period:
1-Historical period, 2-Average tendency 3-Frequency of repentance,
4-Average, 5-Level maximum, 6-Level minimum.

According to (BERG, 1934) the level of the Caspian Sea in the middle of the XVI century was very low (-26.6 m), approximately in 100 year its level was high (22.3 m), then it began to drop and early in 18th century it dropped to its minimum level again (-26.00 m). The drop was followed by long period of high level, early in 19th century it reached its maximum level (-22.00 m).

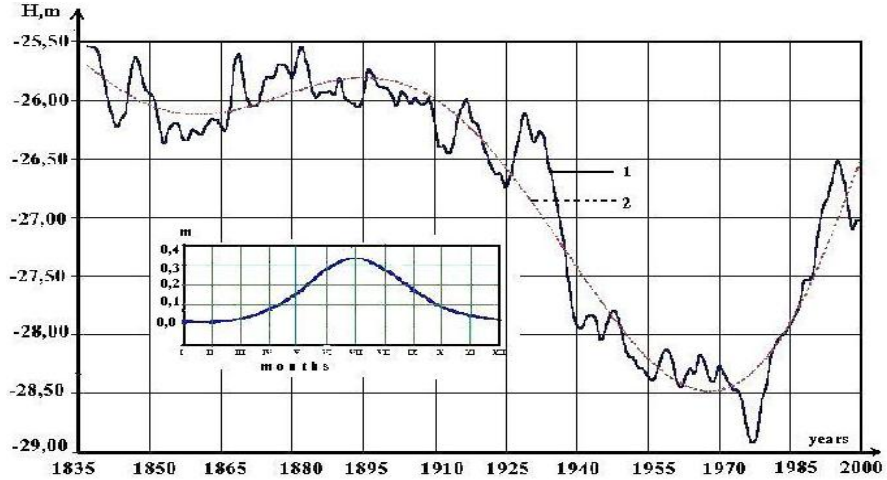

Fig.2 Annual levels of the Caspian Sea measured in the Baku post.
1-measured level, 2- tendency of changing. In the frame, seasonal changing level is shown.

Yearly changeableness. Changeability of the sea level over many years can be observed better on the basis of natural observations, a systematic basis which was made by and academician E.Lents in 1830 (Fig.4). In 1830-1930 the average sea levels were fluctuating within approximately one meter. In 1882 the average level reached – 25.2 meters, the highest point over the observations. The state of relatively equal situation of the level was changed by the period of sharp drop in 1930-1941 by 1.8 m. The drop of the level, though not so sharp, was resumed in the end of 1940; in 1956 it was by 2.5 m lower than in 1929. In 1960 some stabilization of the sea level, about mark – 28.4 m, in 1970 was a sharp drop, in 1977 a sharp drop reached mark – 29.00 m. That is the lowest level over the period of observation. The drop over the whole period of observations totaled 3.8 m, and over the present century it has totaled 3.2 m.

In 1978 the sea level began to increase and in 1995 its average yearly mark rose to the –26.52 m. The level rise over that period totaled in average about 14.5 cm. per year. From 174 cases of observations (1837-2000) the most positive yearly change was in 1867 (38 cm.) and in 1990 (34 cm.) the most yearly drop was observed in 1937 (32 cm.)

Seasonal changeableness and short-term fluctuations. The Caspian Sea level is changing throughout the year. The character and the swing of the seasonal course is determined mainly by the ratio of river flow, the precipitation on the surface of the sea and the evaporation, flow to Kara-Bogaz Gol – sea water balance. Since April the flow is the most and it plays the leading role in the spring-summer rise in the level. A lot of precipitation takes place in the same period, they are able to rise up the sea level to 20 cm., during a year. A seasonal level changeability is shown on Fig.2 (in a small frame). The decrease of the flow and increase of the evaporation from the surface of the sea from July till August brings about a gradual drop to the minimum. Thus, the lowest sea level is usually observed in December-February. The average multiyear swing of the yearly sea level course during 1900-1993 totalled about 30 cm average in the sea.

The short-term level fluctuations are connected mainly with the water circulation, created as a result of touching effect of air current on the water surface, which is causes by the wind stream. Such fluctuations can change from 3 to 70 cm, their duration is from 4 to 27 hours, repeat from 1 to 5 times a month. Northern regions of the sea are exposed to fluctuations, which can reach 2.5 and 3.0 meters.

Reason for the change of the level. The Caspian Sea is a unified natural geosystem where geographical, hydroclimatic, anthropogenic and cosmic factors interact in a complex way. The possibility of forecasting the Caspian Sea level is inseparably linked to the study of it and the uncovering of all of the reasons and forces that determine changes in the level. Unfortunately, not all research workers, studying the problem of fluctuations in the level of the Caspian Sea, have accepted this obvious truth. As a result two different methodological approaches emerged to explain the reasons for and the mechanism of these fluctuations in the level of the Caspian Sea: the geological-geomorphologic and hydro-climatic which, unfortunately, developed more in competition than in agreement with each other.

Geological factors. It is necessary to note that opinions of geologists on the role of geological factors in the sea-level fluctuations differ. Thus conducting detailed analysis (FYODOROV, 1956) pointed that in geological period of transgressions and regressions the level of Caspian Sea is associated with climatic reasons. In his opinion, because of dynamic equilibrium between water balance lake-sea and its area (and level), tectonic reasons at all cannot cause level fluctuations in the conditions of closed basin under invariable climatic conditions. Conducting of two-three and four-time leveling and sea-rafic measurements allowed (LILIENBERG, 1994) this author to draw up two maps of contemporary vertical motions for the first half and third quarter of XX-th century. In author's opinion, motions are sigh-variable, differentiated and contrasting.

From 1930 to 1945 level of the Caspian Sea declined by 2 meters, from 1978 to 1995 raised by more than 2.48 meters. It is very likely that relatively small speeds usually inherent to tectonic plates cannot create such great changes in levels for the short time**.** In addition we will note that they can hardly change their direction several times during one century. In the whole, the analysis of the role of geological factors in sea-level changes conducted by us, allows to conclude that lead

role in geodynamics the of Caspian Sea region plays horizontal motions and vertical ones are derivative of them. In all, the contribution of these motions in the level change can be estimated at 10-15%.

Hydroclimatic factors and water balance. The main factors affecting the present level of the Caspian Sea is the change of the climate in its basin, which is linked with the change in the contributions of the various sources of the water. The balance of water in the Caspian Sea is determined by the following factors: 1) surface river flow into the sea; 2) precipitation over the surface of the sea; 3) underground flow into the sea; 4) evaporation from the surface of the sea; 5) outflow into the gulf of Kara-Bogaz-Gol. The first three factors constitute additions to and the last two, subtractions from the water stock of the Caspian. The average values for the main constituents of the water balance are given in the Table 1.

Surface flow into the sea is the main source of water flow into the Caspian. Six large rivers contribute bulk of the surface flow into the Caspian Sea: the Volga, the Kura, the Ural, the Terek, the Sulak and the Sefid-Rud. The total average yearly flow from rivers into the Caspian since the instrumental observations began (1881-1998) is 299,5 km^3 or 77,2 cm of the height of the water, with a difference of 260 km^3 between maximum and minimum flow.

Table 1. Average values components of water balance for period 1900-1996.

Periods	Increase Of level, cm	Rivers Flow, km^3	Underg-Round flow, m^3	Precipitation, km^3	Evaporation, km^3	Flow into Kara-Bogaz-Gol bay, km^3
1900-1929	-21,0	332,4	4,0	69,8	389,4	21,8
1930-1941	-173,0	268,6	4,0	72,9	394,8	12,4
1942-1969	- 27,0	285,4	4,0	74,1	356,3	10,6
1970-1977	-65,0	240,5	4,0	87,6	374,9	7,1
1978-1996	-222,0	308,8	4,0	86,1	343,7	10,0
1900-1996	-64,0	299,5	4,0	78,1	376,0	12,4

Precipitation on the sea surface plays an important role in the water balance as it makes up the second largest contribution to water stocks. Its significance is much less than that of river flow with an average yearly value of 76.7 km^3 or 19.8 cm of the height of the water. There has been a tendency for precipitation over the surface of the sea to increase since the beginning of this century. The flow of sub-surface water into the sea accounts for 4 km^3 a year, it is the least accurately estimated contribution to the water balance.

Evaporation from the surface of the Caspian Sea is the main form of loss from water stocks. Summarizing the dates given by different authors over the course of a century, we may conclude, that in one year, about 376 cubic kilometers or 970 mm of water evaporates from the surface of the Caspian Sea (PANIN, 1983). In the current century annual evaporation from the surface varied from 920 to 1040 mm of the height of the water.

The flow into the Gulf of Kara-Bogaz-Gol is one of the factors that constitute losses of the water stocks. The average yearly amount of flow for the period 1900-1979 was around 15 km^3 a year. With the aim of reducing losses of the water stocks

of the Caspian, the Gulf of Kara-Bogaz-Gol was cut off from the sea by a dam in 1980 and the inflow of seawater stopped. The dam across the Gulf of Kara-Bogaz-Gol enabled the saving of more than 40 km^3 of seawater in 1985, which constituted a general rise in the sea level of up to 25 cm.

It is clear from the table, that at the beginning of the century (1900-1929) fluctuations in water level were around an average mark of –26.2 m within a range of 0.5 m. High sea level and its relative stabilisation were at that time connected to favourable climatic conditions (an influx of damp winds from the North Atlantic), which caused high water levels in rivers and a relatively stable equilibrium between gains and losses in the water stocks of the sea.

During the 1930s is the period of relative balance was exceeded by a period of deficit, which reached 60 cubic kilometers a year. The great climatic anomaly which covered the Northern Hemisphere at the beginning of this century and reached its highest extent in the 1930s, led to considerable arming of the climate. The rate of evaporation grew (to 394,8 cubic kilometers a years), and low water level in the rives caused a reduction in the flow of river water into the sea during the period 1930-1941 to on average 268,8 cubic kilometers a year. As a result, the level of the Caspian Sea fell sharply by 1,8 m and fall in the sea took place at an average rate of 16 cm a year. The latest increase in the level is the result of a significant change in the climate of the Caspian Sea basin. Beginning in 1978, a change in the general circulation of the atmosphere occurred, the number of cyclones in the Atlantic and Western-Europe increased with a simultaneous increase of their water capacity by 35 and 18 % respectively (SIDORENKOV and SHEYKINA, 1996). As a result of the appearance of these climatic conditions, evaporation from the surface of the sea reached 948 km^3 a year with a simultaneous increase in precipitation over the surface of the sea (up to 22,5cm). The development of this state of affairs caused gains and losses to tip over towards a positive balance (MAMEDOV et al., 1998).

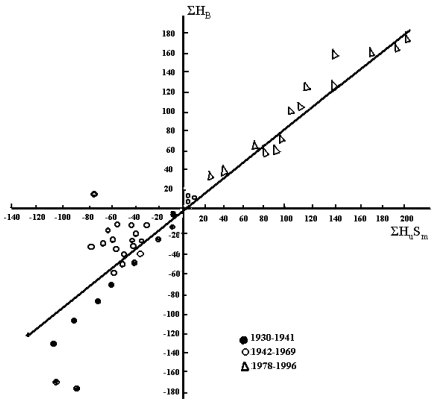

Fig. 3 Comparison measured and calculated from the equation of water balance of variability of a level of the Caspian sea in various periods of observations.

All the above mentioned is also confirmed by Fig. 3, where for all the three considered periods nearly linear dependence between current sums of calculated and measured values of the sea level changes is represented.

Thus, it may be stated the present changes in the level of the Caspian Sea by 85-90% are caused by corresponding changes in the contributions from the different factors that affect the water stocks.

The anthropogenic factors. At last, it is necessary to note that sea level change depends in a certain extent of anthropogenic factors. First of these is irretrievable water removal from drainage – basin of the Volga and other rivers. Intensive use of river water resources since 1940s, led to decrease the quantity of surface influx, into the sea, to its inter annual redistribution and, as a consequence, to additional sea level decline. In the 1970s reduction of the quantity of Volga flow due to irretrievable removal in the purpose of national economics already amount about 40 km³ a year. Only from 1940 to 1990, the sea received more than 900 km³ of the river water loss. And that is more than three-years Volgs's flow in average climatic conditions. According to the data of Reshetnikov (ANONYMOUS, 1986), sea level rise would begin not in 1978 but 22 years before if these were not for irretrievable water removals. Thus joint influence of anthropogenic factors such as irretrievable removal of river water, getting the climate warmer and pollution of sea surface can affect level change by 3-5%.

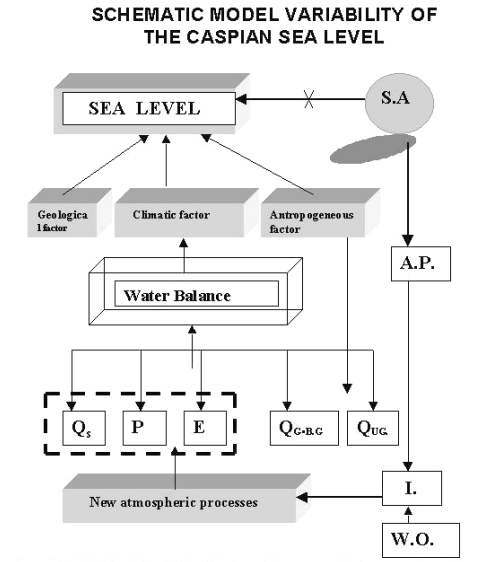

Fig.4. **LABELS: S.A.**-Solar activity, **A.P.**-atmospheric processes, **I**-interaction with world ocean, **W.O.**-world ocean, Q_S-surface river flow, **QG.B.G.** flow to Gulf Gara-Bogaz-Gol, **QU.G** - Underground flow in sea.

Scheme of the model for Caspian Sea level changeability is shown on Fig. 4. The substance of the model is in the follow. As a Solar activity formates specific type of atmospherical circulation. Then this circulation interacts with underlying lane, exceptionally with World Ocean, and formats a new type of atmospherical circulation, which determines quantity of river flow in the sea and precipitation on the sea mirror, and also quantity of evaporation from its surface. All above mentioned components together with underground flow and flow to Kara-Bogaz Gol determine the Caspian Sea water balance. In the model, are taken into account geological and anthropogenic factors.

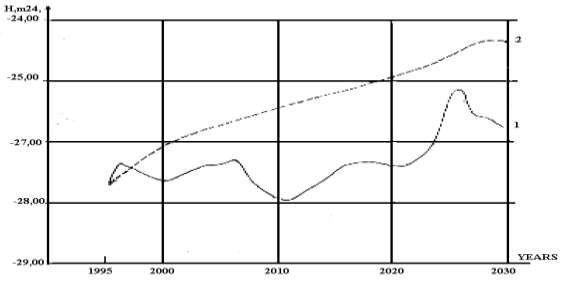

Fig.5. The long-term prognosis of a level of the Caspian Sea. 1-10%, 2-50% probabilities.

Long-term forecast of the Caspian sea level. Else in 1993 the author in co-operate with Gumbatov (MAMMEDOV and GUMBATOV, 1996) carried out forecast of future changing of the level in first approximation, with account on all the abovementioned peculiarities, exceptionally solar-Earth ties and modern forms of atmosphere circulation in the Caspian Sea basin (Fig.5). Due to this forecast the stabilization of the sea level by 1996 and then slight fall down was expected. His forecast was confirmed in practice.

Environmental problems. That environmental problems in the Caspian Sea are tentative some areas became dead zones, Caspian shelf mainly loses its value as a spawning place for Caspian Sea fishes. Main reasons is the constant pollution of the sea. There are various sources of the pollution, which we can classify as follows: a) river flow; b) inshore industrial and municipal waste water; c) offshore and inshore oil extraction; d) sea level rise, as a result of floods in coastal zones, where many oil wells still function. There are also natural pollution sources in the sea as mud volcanoes or griffins.

Unfortunately, no any regular monitoring of Caspian Sea contamination are conducted now. The situation is connected to some purposes, firstly, financial problems. That is why scientists have to use last year's data to form an environmental picture of the sea. This approach is not so far from the reality, because of the pollution characteristics for the region.

Pollution from river flow. On the data of nature protection authorities, quantity (in mln. tons) of contaminants inflow in the Caspian Sea by the Volga River is as follows: SSAS – 60,0; oil products – 145,0; phenols – 1,20; detergents 3,10; copper – 1,60; zinc – 0,1. Once we can see the difference, the role of this river in the pollution of the Caspian Sea is clearly evident. According to the competent authorities data in 1992, the volume of the waste water from coastal individual sources was 6799 mln.m^3 including: Russia –3423, Azerbaijan – 1708, Turkmenistan –13, Kazakhstan – 1650.

Pollution from industrial and municipal waste waters of coastal cities. After collapse of the USSR many productive facilities, including those placed on the Caspian shore or along the river, were closed. This process had its positive environmental results because the amount of wastes was appreciably decreased. Now we can see reducing of pollutants concentration and improvement of environmental conditions in the coastal areas of the Middle Caspian.

Oil pollution. Oil pollution plays a distinct "role" in the total pollution of the Caspian Sea. According to the data of airphotosurvey conducted in the different parts of the Caspian Sea about 500 km² of the sea surface is constantly covered with oil films.

Since the beginning of the exploration of oil and gas, total amount of oil extracted in the Caspian region exceeded 1,5 bln.tons. The level of extraction, refinery and transportation technologies was and even now stays very low, thus the loss of oil products reaches 2% of total amount. As a result of average concentration of oil and hydrocarbons in the Caspian Sea water and some areas decades times exceed MPC. After collapse USSR a new ERA in hydrocarbon structures in the

offshore Caspian Sea was begun. Oil experts estimate the Caspian region has 10 bln. tons in proved reserve. New littoral independent states began to assimilate development of new oil structures and world leading oil companies paid accentual attention to the region. All Caspian states are gragged along their economical benefits and nobody worries that if extracting of 1,5 bln.tons has lead to critical ecological situation and that development of 10 bln.tons will lead to catastrophe.

Ecological results of sea level rise. (Fig.6). Almost all communities and economical objects in the Azerbaijan coastal zone were affected by flooding from the rising Caspian sea level. In zone of influence were near 50 communities, 250 industries, 10 thousands ha of irrigative lands, and resorts for 200 000 people. Summary loss in 1995 was approximately near $2.0 billion. (Table 2).

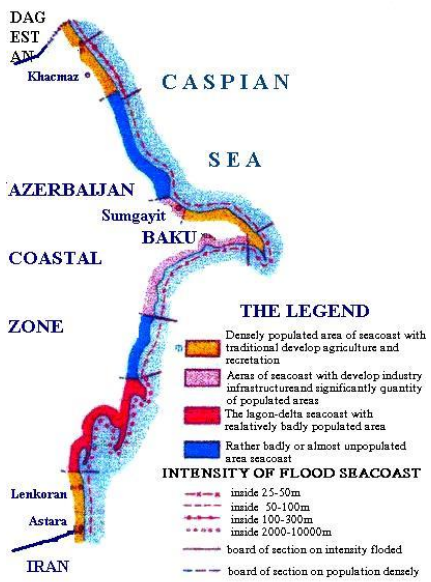

Fig. 6 Ecological and socio - economic condition of the Azerbaijan coastal zone after rise of a level of the Caspian Sea (1978-1995).

Table 2. The flooded territories (km^2) and economic loss (million AZM[1]) of the Azerbaijan coastal zone of the Caspian Sea from last rise of a sea level (1978-1995).

ADMINISTRATIVE AREAS	Areas of flooded Km^2	Civilian building	Industry building	Objects of infrastructure	Objects of communication	Zones of recreation
Khacmaz	20,7	-	-	57	14351	3097
Divichi	10,4	-	-	-	-	-
Siazan	6,1	-	-	-	-	-
Khizi	3,1	-	-	-	-	-
Absheron	30,8	-	137876	2000	14300	3000
Salyan	0,6	-	-	-	-	-
Neftchala	362,9	31200	44336	11679	155	10385
Masalli	5,5	-	-	-	-	-
Lenkoran	356,6	31718	27058	9261	2190	549
Astara	10,5	18169	27800	3601	947	750
TOTAL	807,2	81087	237070	26598	31943	17781

[1] 4500 AZM=1$

CONCLUSIONS

1.The investigations of space-temporal changeability allow us to conclude that, when one implements some actions, changes of the Caspian sea level should be considered as a multistage process. The result of long temporal observations obtained – first stage – is defined. Then to this point added the changes connected to seasonal changeability of the sea level – second stage. To the level obtained as a result of this composition are added the changes connected to the coastal surge processes – third stage. At last, we are to take into account the level changes obtained on the sea water surface due to rough waters, caused by winds – forth stage.

2. Data analyses show, that level fluctuations diapason within historical period is on the range of 15 meters and on XX century – 4 meters. That let us to clear that the last level rising is not anomalous for the Caspian Sea. It is necessary to take into account particularities of every kind of human activities connected with the sea.

3. The dominant influences of (80-85%) on the Caspian Sea level are hydroclimatical changes.

4. The main sources of pollution of the Caspian Sea in last decades are rivers' runoff, oil extraction and level rising, when coastal areas with large quantity of oil wells and different sewage system were flooded.

REFERENCES

ANONYMOUS, 1986. Caspian Sea hydrology, Moscow. p.356.

FYODOROV, E.A., 1956. The reasons Caspian sea level fluctuations in the Quaternary period. Proceedings of the Institute Oceanology. T.XV.

GUMILYOV, L.N., 1980. The History Caspian sea level fluctuations for 2000 years (from IV c. be. to XVI c. n.e.). in the book «The fluctuations of the moistness for Aral-Caspian region», Moscow.

LILIENBERG, D.A., 1995. Spatial-temporal variations of recent endogeodinamics of the Caspian region: horizontal and vertical movements, mud volcanism, seismicity. Proceedings 1st Turkish International Symposium on Deformations. Istanbul.

MAMEDOV, A.V., 1995. Climatical rhythms for Pleistocene and Golocen and fluctuations Caspian sea level. Proceeding RAN, Geographical serial №4, p.130-141.

MAMEDOV, R.M., HUMBATOV, A.I., 1996. long-term prognosis of the Caspian Sea level. Regional workshop on "Integrated coastal zone management", Chabahar-I.R.Iran 24-29 February, p., 79-84.

MAMEDOV, R.M., KULIZADE, L.A., GADIYEV, Y.H., 1998. Impact climate anomalies on the level of Caspian Sea. The Second Int. Conf. On "Climate and Water", Espoo, Finland, 17-20 August, p.972-980

PANIN, G.N., 1987. The evaporation and heat exchange of the Caspian sea. p.88

RICAGOV, G.I., 1992. Analyses of changing Caspian sea level. Moscow, p.249

SIDORENKOV, N.S., SHEYKINA, V.I., 1996. Exchanging of climactic regime of the Caspian Sea and Volga –river basins for last century. Water resources, v.23, №4.

AN INTERNATIONAL LAW PERSPECTIVE OF TRANSIT OF OIL AND GAS IN THE CASPIAN REGION AND THE ENVIRONMENTAL IMPACT OF ITS EXTRACTION

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INTRODUCTION

It has been almost 10 years since the Soviet Union as a single subject of international law disappeared and the birth of the new Commonwealth of Independent States was announced. The Caspian Sea is now bordered by Azerbaijan, Russia, Kazakhstan, Turkmenistan and Iran, each of them claiming sovereign rights concerning the exploitation of large offshore oil and gas deposits[1] under the Caspian Sea.

However, while the enclosed Caspian Sea has the potential to be one of the world's greatest future sources for oil, there are a number of legal complications, which still have to be resolved for this potential to be realised. The definition of the legal status of the sea has emerged as one of the most urgent problem facing the region. Consequently, oil companies have hesitated to invest as long as the legal status is not defined, and the construction of possible trans-Caspian-pipelines to deliver oil and gas to the world markets along with the final conclusion of a Convention on the protection of the Caspian environment have been delayed.

Secondly, as the Caspian Sea is an inland body of water and three of the Caspian states are land-locked, the oil and gas needs to be shipped via pipelines through other state's territories. Related to those transit pipelines are further legal aspects like the freedom of transit on one side and territorial sovereignty on the other.

Thirdly, the dangerous environmental impact, which normally goes hand in hand with the exploitation of hydrocarbons, should be examined from the International Law perspective. Common environmental regulations and the application of internationally accepted standards are required to protect this vulnerable Caspian Sea, but still remain lacking.

THE OWNERSHIP OF CASPIAN SEA RESOURCES

The unique geographical characteristics of the Caspian as the world largest inland body of water, has so far prevented its legal classification. The lake covers an area of approximately 370.000 km^2, and stretches 1.200 km from north to south and 320 km form east to west. The controversy of whether the Caspian should be shared according to internationally accepted practices for lakes or whether the principles of

[1] Proven oil reserves: 35 BBL, plus estimated newly discovered 50 BBL of Kashagan field and estimated some 360 Tcf of gas; US EIA, June 2000, *The Wall Street Journal*, 5/03/2001.

the Law of the Sea should be applied, or the resources could be jointly used under a regime of a so called *Condominium*, a topic which arose when some of the Caspian littoral states began to grant concessions for offshore oilfields to foreign companies. As the issue is due to be solved in near future, just a brief suggestion for how it could be settled should be given.

As no valid[2] bilateral or multilateral treaty[3] defining the legal status of the Caspian Sea exists to give any indications regarding the exploitation of the seabed and the subsoil resources, with the principles of the UNCLOS not directly applicable[4], it is now up to the Caspian states to do effect a resolution themselves, according to general legal principles of international law by which the Caspian states are bound. The real issue is now not whether the Caspian should be divided, but the appropriate method for doing so.

The overwhelming majority of treaties that delimit boundaries in lakes or inland seas have adopted the median line between the opposite shores, but there seems to be no customary rule in international law concerning the delimitation of lakes and internal seas. At this point, in its *North Sea Continental Shelf* case, the Court and individual judges agreed concerning the delimitation of maritime areas, that the same principles would be applicable to lakes, rivers and marine areas alike.[5] Looking at the most recent water and subsoil related maritime boundary cases of the ICJ, one can find that the general preferred equidistance method (in accordance with Art 15 UNCLOS) was modified because of historic titles[6]or other special circumstances[7] in order to achieve an equitable solution.

Some useful insight on how the principle of "equitability" should be applied to an international inland sea like the Caspian could be provided by provisions of the International Law Commissions **1997 Convention on the Law of the Non-navigational Uses of International Watercourses**, assuming that the

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[2] Iran did not accept the agreements of seabed-division between Russian and Kazakhstan or Azerbaijan.

[3] The treaties of **1935** (*L. N.T.S.* vol. CLXXVI, No: 4053-4077) and **1940** (Soviet documents on foreign policy, Moscow, p.424ff) between Iran and the USSR only describe a *modus operandi* for navigation and fishing on the Caspian. The treaties do not outline any maritime boundary nor do they divide the seabed resources, with the exception of an exclusive ten-mile fishing coastal zone, according to Art. 12 (4) of the 1940 Treaty.

[4] Only Russia has ratified it. Secondly, a close look at the *travaux préparatoire* makes clear that Part IX does not cover enclosed seas like the Caspian without at least one direct outlet to the open sea.

[5] *FRG v. Denmark and Netherlands*, 1969 ICJ 3, Jugement, para. 8, 124-27, 146, 175.

[6] *Tunisia/Libya Continental Shelf Case*, 1982 ICJ, at. 33-37, 71, 83-86.

[7] *Gulf of Maine Case* (Canada v.US), ICJ 1984, p.246: Decision influenced by economic considerations.

Caspian could be regarded as a "watercourse" within the meaning of its Art. 2.[8] As, the wording and the *travaux préparatoire*[9] of its Articles 5 and 6 makes clear, the term "equal" does not necessarily mean that each state would be entitled to an equal share of the "watercourses" resources, nor that the water itself should be divided into proportional shares. Article 6 (1.) rather takes into account all relevant factors and circumstances, including geographic […] ecological and […] economic factors. Thus, a country such as Iran would not necessarily have the right to claim its "equal" share of 20 % of the Caspian resources.

In order to reach an equitable result, the Caspian "lines" should be drawn on the following suggestions: First, taking one or more of the three accepted methods for delimitation[10] between adjacent states (and for the tentative states the equidistance method) by which to construct a tentative boundary.[11] The outcome should then be examined in the light of its proportionality to the length of the countries' relevant coastlines.[12] Considering the outcome of this proportionality study and the 20% "equal" claim of Iran, Iran would be the most disadvantaged state out of the littoral five. Thus, according to the ICJ[13] the comparable larger coastline of Iran „[...] would constitute a circumstance calling for an appropriate correction." Aside from the former proportionality method, the unique history of the Caspian virtually requires it to be taken into account for the following reasons.

First, for at least 70 years the Caspian used to be a so-called "*Soviet-Iranian Sea*", which had never officially been contested. As stated above, international law does not provide a state to claim an equal part of the whole, but one could take into consideration that the newly emerged-four-against-one counterweight against Iran would neglect a certain "historic title" of an equal "more" in favour for Iran.

[8] Adopted by the UN General Assembly on 21 May 1997, UN. Doc. A/RES/51/229.
[9] *Environmental Law and Policy*, vol.24, 1994, p. 335.
[10] Equidistance line (e.g. Great Lakes of North America, Lake Geneva), perpendicular to the general direction of the coast (e.g. Arbit. Trib. for maritime boundary Guinea and Guinea-Bissau (1986), 25 I.L.M. 252) or bisection of angle formed by the coastline of two states (e.g. ICJ *Gulf of Maine*, op. cit.)
[11] The shares would be as following in %: Azerb: 21, Iran: 13.6, Kazak: 28.4, RF: 19, Turkmen: 18, see: Maleki, A. *Iranian approaches to the division of the Caspian Sea*, Institute for Caspian Studies, Tehran.
[12] *North Sea Continental Shelf Case*, op. cit., at. 17-27, 46-54; *Gulf of Maine Case*, op. cit. p. 322, para. 182. The length of Coastline in % of total coastline would be: Azerb. 15.2, Iran: 18.7, Kazak: 30.8, RF: 18.5, Turkmen: 16.8, see: Clagett, B. M., *Ownership of Seabed and Subsoil Resources in the Caspian Sea Under the Rules of International Law*, Caspian Crossroads Magazine, vol. 1, issue No.3, Fall 1995.
[13] See: *Gulf of Maine Case*, op. cit. at 323, para. 185.

Secondly, concerning the four Caspian CIS states, attention should be given to the former internal **administrative boundaries**.[14] Even by applying the principle of *uti possidetis juris* and taking the ICJ judgement into consideration, internal administrative boundaries become "transformed into international frontiers" when a state breaks up into multiple successor states,[15] a development which would only be relevant between the former soviet republics but would have no effect towards Iran. Furthermore, as the disputed Serdar/Kyapaz oil field has been explored and extracted by Azerbaijan alone, it should given entirely into the Azerbaijan sector, to avoid the splitting of a single oil field.[16] Following this it still would be possible to negotiate parallel a joint development agreement for the exploitation of this field.

To sum up, since under international law there is no evidence for a common ownership of the Caspian subsoil. As such, it should be divided along a modified median line, which takes into account the proportional length of the relevant coastline, historic titles, former *de facto* boundaries, by which to avoid splitting single oil deposits.

In terms of environmental security the Caspian states could decide that the Sea be regarded as the "common heritage" of the littoral states, by reference to the provisions of Part XI of UNCLOS. Furthermore, by applying the Law of the Sea provisions by analogy, Art. 123, Part VII Sect. 2 and Part XII, UNCLOS could provide the framework for the joint-management of the Caspian's marine living resources, and the protection and preservation of its marine environment.

THE LANDLOCKED STATES AND THE RIGHT OF TRANSIT

Apart from the still unresolved question of ownership of the subsoil resources, the subsoil's development would be largely pointless without an appropriate concept for how to transport its natural wealth to the world market. Since the collapse of the regional market following the demise of the Soviet Union, the only key for large-scale investment and development is the transit to markets.

Taking a short look at the Caspian map, one will notice that three of the oil- and gas-rich Caspian CIS states are landlocked and can only export their resources via transit through neighbouring countries. As a result, possible export routes are critical. The dependence of Kazak, Azeri and Turkmen oil and gas on Russian pipeline infrastructure has been subject to abuse by the imposition of higher tariffs

[14] In 1970 the Soviet Oil Ministry divided the Caspian seabed between its republican affiliates into so-called "sectors".

[15] Frontier Dispute *Burkina Faso v. Mali*, 1986 I.C.J. 554, 566; *Gulf of Fonseca Case*, 1992 I.C.J. 388.

[16] The ICJ stated „[...] that unity of deposit [...] is reasonable to take into consideration in the course of negotiations for a delimitation." *North Sea Continental Shelf Case*, op.cit. at. 51, 52; *de facto* line produced by pattern of grants of petroleum concessions in the disputed area, *Tunisia/Libya*, op.cit. at. 83-4, paras. 117-18, *Gulf of Maine Case*, op. cit. at. 310-11, paras. 149-52.

and quotas by the Russian Federation in order to control the export quantities of these countries. That is why this countries pushing for the construction of new pipelines.[17] However, Russia still tries to keep its grip on the Caspian area. Most involved governments and oil companies therefore favour a multiple export-pipeline-system in order to avoid dependency on the goodwill of a single transit state.

The United States and Turkey support the **Baku-Ceyhan pipeline** as the main Export Pipeline for a host of political, security and ecological reasons. While Kazakhstan, Turkmenistan and a couple of oil companies are in favour of the cheaper pipeline through Iran, the U.S. government still opposes an Iranian route for political reasons, put law in place, sanctioning foreign and U.S. investment in the Iranian petroleum industry.[18] But the US government has yet to enforce the US Iran and Libya Sanctions Act of 1996 (ILSA) against non-US companies.[19]
Furthermore, there is some uncertainty about the transit passage through the narrow Bosporus waterway. Turkey, profoundly concerned about the implications of significant amounts of Caspian oil being shipped through the Bosporus, recently stressed again that the maximum capacity of movement the Turkish Straits can carry has already been reached.[20]

However, Turkey's ability to regulate traffic through the Bosporus is still limited by the **1936 Treaty of Montreux**. Not designed with huge oil-tanker traffic in mind, it sets very strict limits on regulations of the Straits by the Turkish government for any purpose. The treaty requires complete freedom of transit and navigation without formalities of taxes, fees and requirements for local pilots. While the overall Convention still has the support of its signatories, Turkey's desire to take necessary measures to protect the safety of the Straits is generally seen as legitimate.[21] Against the opposition of Russia and other Black Sea states but with the

[17] E.g.: CPC Tengiz-Novorossisk-Pipeline, phase 1 flows began end March 2001.
[18] White House Executive Order 12957 (16 March, 1995) and the Department of Treasury's Iranian Transaction Regulations – prohibiting US involvement in petroleum development in Iran; The US Iran and Libya Sanctions Act of 1996 (ILSA), which targets foreign companies with sanctions if investment exceed US$ 20 million annually.
[19] The recent election of President George W. Bush shows some promise that ILSA may be allowed to expire on the 5 August 2001.
[20] Turkey's Minister for maritime affairs quoted by *Lloyd's List International*, 27 February 2001.
[21] One could see the need to revise the Montreux Convention in accordance to the *rebus sic stantibus* principle of International Law, which postulates that all treaties are concluded under one condition, that the treaty remains in force only as long as the circumstances under which it was concluded have not changed radically. Turkey would be required to prove, that a "radical change of circumstances" within the meaning of Art. 62 (1.) (b) of the 1969 Vienna Convention on the Law of Treaties arose.

support of the International Maritime Organization (IMO) Ankara had some success in imposing some regulations on passage.[22]

Let us now return to the topic of International Law „surrounding" the land-locked Caspian states. The significance of transit can be characterized as attempting to find a balance between the needs of international traffic and the sovereign territorial rights of transit states. Focusing on transboundary pipelines, a distinction must first of all be made between submarine and terrestrial pipelines.

Historically, the question of **freedom of transit** has been recognised in international law since the 17th century onwards. Since the need for international regulations on transit became apparent after World War I, there has been much emphasis on finding regulations, which would satisfy both the land-locked and the transit states. Certain multilateral conventions such as the 1921 Barcelona Convention, the 1947 GATT or 1965 New York Convention[23] and other bilateral treaties[24] have addressed access rights for states in general and land-locked states in particular, and partly deal with terrestrial pipelines as a means of transit transport.

Looking at relevant provisions of these concluded treaties, one can see that much emphasis has been placed on such principles as non-discrimination and non-interruption, and the obligation not to impose any transit-fees or custom duties on traffic in transit nor unreasonable charges on goods in transit.[25] However, a common feature of these treaties is that they do not create a self-executing right of transit or building of terrestrial pipelines over neighbouring territories; instead, they require individual land-locked and transit states to reach agreements on the modalities of

[22] Since November 2000 e.g. certain classes of tanker have to be accompanied by tugboats

[23] 1921, Barcelona Convention and Statute on Freedom of Transit (LNTS, vol. 7, p.11); 1947 GATT, Art. V (UNTS, vol. 55, p.194); 1958 High Seas Convention, Art. 3 (UN Doc. A/CONF. 13/C 5/L); 1965 New York Convention on the Transit Trade of Land-locked States (UNTS, vol. 597, p.42); 1982 UNCLOS, Art. 125 (21 I.L.M. 1261).

[24] Convention on Construction of Oil Pipelines between the Plata Countries (Latin America), Montevideo 6 February 1941, Hudson, *International Legislation*, Oceana Publications Inc. New York, 1970, vol. VIII (1938-1941), No. 601; Chile-Bolivia Sicarica-Arica Pipeline agreement, 24 April 1957, Decree No. 363, published in *Chilean Official Gazette* No. 23 834 of 30 August 1957; US-Canada Transit-Pipeline Treaty, 28 January 1977, *US Treaties and Other International Agreements*, Vol. 28, Dep. of State, Washington D.C., pp. 7451-7460; and a number of treaties concerning North Sea pipes.

[25] Art. V GATT, Art 3, 4 Barcelona Convention 1921, Principle V 1958 High Seas Convention, Principle IV 1965 New York Convention, Art. 127 UNCLOS, Art. 7 ECT.

transit in specific areas before the right may be exercised.[26] Furthermore, since some of those treaties have been ratified by only a small number of transit states, the rules they contain are not widely applicable *qua* conventional law, nor can they be used as evidence of a customary rule in favour for land-locked states. On the other hand, it is submitted that the mandatory provisions of Part X of the 1982 UNCLOS - concerning the rights of land-locked states - are likely to become norms of customary law in the future.[27]

As a consequence, unless the parties decide differently, the law applicable for terrestrial pipelines is normally governed by the provisions for safety, liability for damage etc. of the relevant transit state.

Concerning the laying of the proposed submarine **Trans-Caspian-Pipelines**[28] the situation may be different. Under the Law of the Sea Conventions, states are assumed to have the freedom to construct submarine pipelines.[29] The sovereign rights of coastal states are limited, and may imply environmental and safety requirements (Art. 193 UNCLOS) to the construction of transit pipelines, but otherwise the freedom of transit prevails. Since the UN Law of the Sea Convention is not directly applicable to the Caspian Sea leaving open to question whether a body of customary submarine pipeline law has been already established,[30] as has been previously stated it is up to the littoral states to decide on the appropriate legal regime relating to submarine pipelines.

However, should the littoral states decide to divide the subsoil into national sectors and keep the body of water under common ownership, this could have an even bigger impact on the "limited" freedom to lay pipelines under the Caspian Sea, particularly if they agree that the submarine pipelines shall not be treated as a part of the subsoil.[31] Not only national and international law relating to environmental protection and other legitimate safety aspects of the neighbouring state could then hamper the construction, but a consent of all littoral states would then be required, as spills from a damaged pipeline would have an ecological impact on the commonly owned body of water.

Finally, the significance of establishing a general legal framework suitable for a secure and unimpeded transport of oil and gas through pipelines from the Caspian region and the wider FSU to world markets - mainly Europe - was the

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[26] Vasciannie, S.C., *Land-Locked and Geographically Disadvantaged States in the International Law of the Sea*, Oxford, 1990, at p. 198.

[27] Ibid. at p. 221.

[28] From Aktau (in Kazakhstan) to Baku (further to Ceyhan) and from Turkmenbashi to Baku (Ceyhan).

[29] See e.g. 1958 Convention of High Seas, Arts. 2, 3 and 26; 1982 UNCLOS, Articles 58 and 79.

[30] Wiese, W., *Grenzüberschreitende Landrohrleitungen und seeverlegte Rohrleitungen im Völkerrecht*, Berlin, 1998, p. 373.

[31] Since Russia and Iran still strongly oppose such laying because of possible environmental impact.

impetus for the establishment of the **Energy Charter Treaty** (ECT) in **1994**. This treaty is a legally binding multilateral instrument between some 50 mainly eastern- and western-European states and the EC. Since Iran is not a party to the ECT, the norms of the treaty apply to exploitation and transportation of the Caspian hydrocarbon resources in all parts of the Caspian Sea, other than those controlled by Iran.

While emphasising the principle of state sovereignty and its sovereign rights over its natural resources, the ECT aims primarily to create an open and competitive market for energy materials, based on the principles of freedom of transit, non-discrimination and the obligation not to interrupt or reduce the flow of energy, despite disputes with any other countries concerning this transit (Art. 7(6) ECT).

The issues evolving out of the use of cross-border pipelines are regulated within Article 7 in the context of energy transit. The main objectives of the Treaty are to protect foreign investors' property and concluded contracts, to enable and facilitate transit and, within capacity, to provide access to pipelines. With regard to the possibility of mandatory construction of transit facilities the Energy Charter Treaty goes further than the Barcelona Convention. However, a contracting party may refuse the construction of such facilities if it is contrary to national legislation regarding environmental protection, land use, safety, technical standards or commercial terms (Art. 7 (5)). By and large, the principle of state sovereignty prevails.

Furthermore, since it became obvious that there is scope for further development of the transit provisions of the ECT, in 1998 a **Transit Working Group** was established with the aim of creating a multilateral legal framework to secure and facilitate energy flows via existing and future pipelines. In detail, without derogating from the earlier agreed ECT's obligations and principles and reaffirming the right of access to and from the sea and freedom of transit for land-locked States,[32] the negotiations are focusing on a framework for pipeline related issues. The negotiations for the final draft of the Energy Charter Protocol on Transit are due to be concluded by mid-May 2001.

CASPIAN OIL UNDER INTERNATIONAL ENVIRONMENTAL LAW

The Caspian Sea is also special as a unique ecosystem that is rich with diverse aquatic, avian and terrestrial wildlife. While the media and governments have placed much emphasis on the political and economic situation surrounding the Caspian developments, little attention has been paid to environmental dangers posed by further oil extraction and transportation. Past oil ventures have left the inland sea polluted, and since 1978 the Caspian has for reasons yet unaccounted for risen

[32] Art. 3 (1), 4 and Preamble of Draft Energy Charter Protocol on Transit, TRS 25 Rev.8, 8 March 2001.

almost 3 meters,[33] flooding coastal developments and oil platforms, and further polluting the area.

However, environmental issues in the Caspian region are numerous and rather different in nature. The hydrocarbon production includes the establishment of production-infrastructure, offshore drilling platforms and pipelines, which easily becomes a main source of pollution. It is important, however, not to overstate the significance of offshore oil activities in the overall environmental picture. The surface river runoff from the polluted water from the Volga, the Ural and other rivers are heavily polluted with wastewater and seem to be responsible for almost 65 %[34] of the total oil pollution load of the Caspian. However, future large-scale offshore oil developments may end up being major sources of pollution as well. The construction of on- and offshore pipelines, due to be built in an area with a potential earthquake magnitude of Richter 8, implies the risk of spills and leaks from antiquated pipelines and illegal tapping. Furthermore, associated with the offshore drilling are the discharge of oil-tainted produced waters and the use of highly toxic synthetic drilling muds.[35]

Since the currently utilised national and international[36] environmental and technical standards are hopelessly outmoded and still not unified among the Caspian littoral States, one should look to what international law and good practice recommend for taking into account the conclusion of new provisions concerning the offshore oil-industry to avoid a future ecological disaster. In International Environmental Law there is a huge body of treaties, bilateral and multilateral agreements, which are all directly or indirectly related to the exploitation and the shipment of offshore hydrocarbons and the use or decommissioning of offshore installations. Overall, they could give an indication for an evolving customary international law in this field, and at least indicate a rising public and state awareness of offshore production related implication.

International Treaties

Investigating whether there are any international treaties regulating the exploitation of seabed mineral resources reveals that there are only few such resources. The

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[33] See: Frolov, A.V., *New Methods of Managing Caspian Sea Level Fluctuations*, in The Caspian Sea: A Quest for Environmental Security, Ascher, W. / Mirovitskaya, N. (eds.) 1999, p. 80.

[34] See: TACIS Doc: Caspian Environment Programme, Facilitating Thematic Advisory Groups in Azerbaijan, Kazakhstan, Russia, & Turkmenistan, Oil Contamination of the Caspian Sea, February 2000.

[35] The Kazakh Offshore OKIOC reportedly discharged since 1999 38 tonnes of "poorly filtered sulphur sewage" a day into the Caspian, radius of 500m had become highly toxic, BBC Monitoring, 22/02/2001.

[36] E.g. in Caspian oil projects still used BATNEEC (Best Available Technology Not Entailing Excessive Costs) Standards instead of BAT (Best Available Technology) Standards.

reason might be that most drilling operations are conducted in the continental shelf under the relevant states´ direct control and sovereignty. A brief overview of international treaties will serve to highlight recent developments on this area:
First, the **1958 Continental Shelf Convention** (Art. 5 (1), (7)) and the **1958 High Seas Convention** (Art. 24) both require states to prevent pollution of the sea resulting from discharge of oil from pipelines or the exploitation of the seabed and its subsoil. The **1982 Law of the Sea Convention** contains in its Arts. 208-209 a general obligation to adopt and enforce regulations to prevent, reduce or control pollution arising from seabed activities. Concerning the decommissioning of offshore installations, where the 1958 Continental Shelf Convention requires entire removal (Art 5 (5)); the 1982 UNCLOS only reads in its Art. 60 (3): "[…] any installations […] shall be removed […] taking into account any generally accepted international standards established in this regard […]. Since then a lot of work has been done to develop such guidelines and standards, as will be highlighted later.
Providing a background to there understandings in the **1972 London Dumping Convention** and its 1996 Protocol, which includes in its prohibition list any abandonment or toppling of platform site or other man-made structures at sea, and is only applicable to all marine areas except internal waters. However, widely international response, including its ratification from three Caspian states, gives a major indication for an evolving awareness of states in this field.

A subsequent development is the **1973 Convention for the Prevention of Pollution from Ships** (as modified by the **MARPOL 73/78** Protocol in 1978) which is aimed at the shipping industry but has direct implications on the offshore oil and gas industry. In its Annex I,[37] it clearly applies the prohibition of the discharging of oil and oil mixtures into the sea for fixed and floating rigs. However, the definition of „discharge" has been chosen here to exclude the „release of harmful substances directly arising from the exploration, exploitation and associated offshore processing of seabed resources."

A more recent international convention with some significance on the offshore pollution from oil and gas industry installations is the 1992 UN Framework Convention on **Climate Change** (all CIS have ratified). To achieve the stabilisation of greenhouse gases concentrated in the atmosphere (also caused by the consumption of fossil fuels) all parties are required to develop national inventories of emission and formulate and implement national and regional programs of mitigation measures, thought the scope and depth of such objectives remains to be specified.

Supplementary to this agreement is the **1992 Convention on Biological Diversity** (all CIS have ratified), which identifies and monitors the effects of processes and activities that have significant impacts on the conservation of biodiversity. Here, states are required to establish a system of protected areas, once applied at the national level, the provisions possess the potential of a major impact on the installation and operation of offshore platforms and pipelines.

[37] Annex I: Prevention of pollution by oil, 1983.

As pollution in one part of the Caspian may easily affect the neighbouring territories environment, one should draw attention to the broadly accepted principle of *sic utere tuo ut alienum non laedas,*[38] which can also be found in Principle 21 of the **1972 Stockholm Declaration** on the Human Environment,[39] the **1989 Basel Convention**[40] (two CIS ratified) and the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Russia ratified).
Finally, the following global conventions and declarations are relevant to oil and gas operations in general:

- The **1972 Paris Convention** for the Protection of the World Cultural and Natural Heritage (two CIS have ratified),
- The **1974** Offshore Pollution Liability Agreement (**OPOL**),
- The **1977** Convention on Civil Liability of Oil Pollution Damage Resulting From Exploitation for and Exploitation of Seabed Mineral Resources (**CLEE**)(Kazakhstan ratified),
- The **1990** Convention on Oil Pollution Preparedness Response and Cooperation (**OPRC**) (Azerbaijan and Iran ratified), and
- The **1992 Rio Declaration** on Environment and Development and its **Agenda 21**, which in Chapter 17 draws attention to offshore oil and gas operations encouraging states to protect the marine environment against pollution arising from offshore installations. The Rio Declaration is an example of growing state awareness regarding environmental impacts from offshore activities.

While, not all of the Caspian states have signed or ratified these conventions or declarations, the international consensus and political will in respect of the protection of marine environment is remarkable, and a reflection of the evolution of customary environmental law in respect of marine pollution.

Regional Conventions

Since it is most evident that pollution problems in coastal or territorial waters can be better tackled by regional agreements, one will find a number of regional conventions dealing with pollution and waste disposal in the field of seabed exploitation. Under the auspices of the **U.N.E.P. Regional Seas Programme,** a series of such conventions have been concluded.[41] In those conventions one can find

[38] Equal to the principle of good neighbourliness; Wolfrum, 33 *German Y.B.I.L*. 1990, pp. 308-330.
[39] UN Doc. A/CONF. 48/ 14, 16 June 1972, p. 1416.
[40] Convention on the Control of Transboundary Movements of Hazardous Wastes and their disposal, see: Annex I, Y9 - Waste oils/water, hydrocarbons/water mixtures, emulsions and Annex IV, D 6, 7.
[41] All in all there are 29 conventions and protocols, corresponding to more than 13 regions worldwide.

general obligations for parties to take „appropriate“ measures to prevent and control pollution arising from the exploration of their seabed mineral resources. Such a convention could be useful for the Caspian States sharing experiences and lessons.

As with international treaties, a brief overview of the relevant provisions of regional conventions is helpful at this point: After the **1976 Barcelona Convention** had been adopted, the Mediterranean States concluded a number of supplementary Protocols concerning the protection of marine environment. One such dealt with pollution resulting from the exploitation of the seabed, and set out the relatively soft obligation of taking through bilateral or multilateral cooperation all appropriate measures to prevent pollution resulting from seabed activities.[42] Furthermore, the same protocol in its Art. 20 obliges the coastal state to require the removal of an abandoned or disused installation in accordance with "[...] the guidelines and standards adopted by competent international organisation." However, this protocol has not yet entered into force.

One can find comparable regulations in the **1978 Kuwait Regional Convention** and the relevant Protocol;[43] however, the possibility of partial removal of platforms is expressly stated in the Protocols Art. XII (1b).

A further relevant agreement is the **1992 OSPAR Convention**,[44] covering only the North East Atlantic. Designed to complement the existing international treaties, which prohibits the dumping of wastes or other matter from offshore installations, it obliges states to take all possible steps to prevent pollution from offshore sources (Art 5, Annex III) while emphasizing the use of *Best Available Techniques* and *Best Environmental Practice* (Art. 2 (3(b)(i), Appendix 1). In addition, Art. 5 (1) of Annex III states that "No disused offshore installation or disused offshore pipeline shall be dumped and no disused offshore installation shall be left wholly or partly in place in the maritime area without a permit issued by the competent authority of the relevant Contracting Party on a case by case basis."

The recent **1992 Baltic Convention**, being aware of the environmental sensitiveness of a closed sea like the Baltic, requires an Environmental Impact Assessment before exploration and exploitation of the seabed proceeds (Annex VI, 3). Oil and water discharges at the production stage must conform to established MARPOL standards, and it furthermore, obliges all abandoned offshore installations to be „entirely removed and brought ashore under the responsibility of the owner“ (Annex VI, 8).

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[42] Art. 3 of the Protocol for the Protection of the Mediterranean Sea against Pollution Resulting form Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil, 14.10.1994.

[43] 1989 Protocol concerning Maine Pollution resulting from Exploration and Exploitation of the Continental Shelf, into force on 17 February 1990, 19 E.P.L. 19989, pp. 32-35.

[44] Convention for the Protection or the Marine Environment of the North-East Atlantic, into force 1998, available under:
http://www.ext.grida.no/ggynet/agree/mar-env/ospar.htm.

Last but not least, the environmental provisions of the **Energy Charter Treaty** and its Protocol on Energy Efficiency should be mentioned, as their scope covers most parts of the Caspian Sea. In its Preamble, the treaty explicitly recognizes "the increasingly urgent need for measures to protect the environment, including the decommissioning of energy installations and waste disposal, and for internationally agreed objectives and criteria for these purposes". Bearing in mind that the ECT's main goal is to stimulate economic growth and liberalize energy investment and trade in the former East Bloc, one finds a number of rather soft environmental provisions in its Art. 19 ECT.

First, it spells out three general principles of sustainable development, prevention and "polluter pays"; second, it sets forth a general environmental obligation on contracting parties to strive to minimize harmful environmental impacts from all operations within the energy cycle; third, it provides 11 action points for state parties to comply with including environmental integration in energy policy, reflection of environmental costs in energy price, harmonization of environmental standards, energy efficiency and renewable energy sources, promoting cooperation and development of environmentally sound technologies and so forth.

By and large, terms such as "upon request", "promote", "encourage", and "take account of" make clear that neither the Treaty nor the Protocol contain any substantive obligation binding the parties to enforceable environmental commitments. The treaty is silent on the question of liability for environmental damage and does not impose any specific commitments related to protective measures for the decommissioning of energy installations, such as platforms and pipelines. However, regarding the political and economical situation of the former soviet states to which it applies it implies the need to honour the breaking of new ground by coupling trade and investment provisions with an emphasis on the importance of environmental protection.[45]

While it can be noted that much emphasis has been made on getting hard law provisions on pollution of and decommissioning from offshore installations ratified, there is still no comprehensive international or regional convention on this subject. So what are the implications of the over mentioned guidelines and standards?

Guidelines, Decisions And Standards

International practice has a tendency to form new international law, while incorporating non-binding guidelines, produced by competent international organizations, into a conventional text with binding force. The following relevant guidelines shall be briefly mentioned.

[45] Shine,C. *Environmental Protection Under the Energy Charter Treaty*, in: The ECT, Wälde (ed) p.545.

The 1989 **IMO** Guidelines and Standards for the Removal of Offshore Installations and Structures[46] (with Art. 60 (3) UNCLOS back in mind) firmly emphasize that the IMO is the competent organ to deal with this subject. According to these guidelines the general principle is that all disused installations "are required to be removed." Under special defined circumstances, the coastal state may decide whether installations can remain on a case-by-case basis.

The 1982 **UNEP** environmental law guidelines and principles on Offshore Mining and Drilling providing with some soft policy and legal direction for the states to follow in environmental control of offshore installations operating within the limits of their jurisdiction. Based on Council decision 14/31 and a new UNEP *Study of Legal Aspects concerning the Environment Related to Offshore Mining and Drilling within the Limits of National Jurisdiction*,[47] new guidelines are currently being drafted.

A regional example is the **OSCOM** Guidelines adopted by the Oslo Commission under the 1973 Oslo Convention, regarded as complementary to the 1989 IMO Guidelines. They provide in principle a system of special permits to be issued by the contracting parties for disposal of an offshore installation on a case-by-case basis, indicate relevant factors for environmental assessments.

Attention should be drawn as well to the 1994 IMO-GESAMP Guidelines for Marine Environmental Assessments[48] and the 1997 PAME-UNEP Artic Offshore Oil and Gas Guidelines,[49] which are taking most of the new developed standards in account.

Finally, beside the already mentioned ICS-ISO and CEN/TC environmental and technical international standards, the **World Bank** operational policies and environmental standards are of central importance and are often used by other institutions as the basis upon which to develop their own environmental requirements. Also worth mentioning are the World Bank's new safeguard policies for Environmental Assessment (OP/BP 4.01), Environmental Action Plans (OP 4.02) and for Projects on International Waterways (OP 7.50), which would also include the Caspian Sea. Hence, the further development and specification of environmental impact assessments (**EIA**) is one of the most effective approaches to environmental management and protection and in many states have made it a mandatory regulatory requirement for petroleum projects and activities.

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[46] Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone, adopted by IMO Assembly Resolution A.672 (16) on 19 October 1989, IMO Doc. MSC/Circ. 490/Annex , http://www.londonconvention.org/Removal.htm.

[47] See: 15th Council meeting, 18 June 1987; http://www.unep.org/SEC/non3.htm.

[48] GESAMP Reports and Studies, No. 54, IMO London 1994.

[49] 13 June 1997, available at: http://www.grida.no/pame/oil_gas_report.htm.

Concluding Remarks

It is submitted that in reaching a conclusion on this issue, one should focus on the relevant guidelines, decisions and standards as an indication of state practice. As evidenced in the above discussion, it is clear that there exists in customary international law today an obligation not to pollute the environment under the broadly accepted principle of ***sic utere tuo ut alienum non laedas.*** However, in relation to the field of offshore gas and oil industry, state practice in relation to this and other principles and standards is at an embryonic stage with its contents yet to be defined.

Nevertheless, Caspian States remain under a general customary obligation to prevent pollution, which forms part of an overall obligation to co-operate after any damage to the environment. While international customary law may seen inadequate as a precise and substantive standard-setting mechanism, it appears advisable for Caspian States to sit together and establish a regional framework. As discussed, international state practice and experience in managing environmental issues are related to water management, pollution and decommissioning of offshore installations should all be taken into account in such an endeavour.

While this type of co-operation has not yet occurred, there seems to be a light at the end of the tunnel. Under the auspices of the UNEP, the World Bank, the UNDP and the EU-TACIS the **Caspian Environmental Programme** is currently being formulated. This programme could form the basis for further progress in crystallising environmental co-operation. Regional thematic centres have also been established, to assist the development of National Caspian Action Plans and to establish (together with the UNEP) a Framework Convention for the Protection of the Marine Environment of the Caspian Sea. The Convention's finalisation is still hampered by the yet unresolved dispute over the ownership of the Caspian subsoil resources.

CONCLUSIONS

Once the issue of the legal status of the Caspian Sea has been settled, the way will be open for a closer and precise cooperation on strategies by which to protect the Caspian environment from the oil industries' impact. In recent years, a significant number of international legal instruments in the field of marine pollution has emerged. One could assume from this that there is an evolving customary international law concerning the prevention of marine pollution, including those from offshore installations. Finally, the latest efforts to establish a new multilateral legal transit framework can be taken as a good example of how to couple trade and investment provisions with the emphasis on the importance of environmental protection.

THE PROBLEM OF DELIMITATION IN THE CASPIAN SEA

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INTRODUCTION

The Caspian Sea, which in prehistoric times was connected to the Arctic Ocean, is the largest lake in the world and covers an area of about 370,000 square kilometers. Its length is approximately 1200 km stretching from Astrakhan in Russia to Anazali Port in northern part of Iran. Its width ranges between 560 km and 200 km. In the northern part of the Caspian Sea along Russia and the Kazakhstan coasts, the waters of the Sea are shallow with an average depth of approximately 7 meters, ranging between 4 and 25 meters. Starting from the north to the south, the seabed becomes deeper to such an extent that in the middle part of the sea along the foothills of the Caucasus Mountains between Azerbaijan and Turkmenistan, the minimum depth is about 100 meters. The southern parts of the Caspian Sea are the deepest, reaching about 800 meters. Due to the fact that Caspian Sea has been separated from the oceans for around 120 million years, its salinity is only one third of that normally to be found in the oceans.

A lot of rivers supply water to the Caspian Sea, among which are the Volga, the Ural, the Terek and the Sefid Roud[1]. There are five countries bordering this body of water namely Russia, Kazakhstan, Azerbaijan, Turkmenistan and Iran. All of the littoral states of the Caspian Sea possess off-shore oil reserves, but most of these oil-fields are located in the vicinity to the new independent states of Kazakhstan, Azerbaijan and Turkmenistan. Accordingly, if the sea be divided into national sectors both Iran and Russia, which are dominant powers in the Caspian Sea, could gain less shares based on the location of the oil fields. This situation has created lengthy debates over the legal status of the Caspian Sea and resistance of Iran and Russia towards the idea of delimitation of this sea area.

At present some important oil and gas fields have been discovered across the Caspian Sea, some of them are considered trans-boundary deposits located between two or three countries. Undoubtedly any unilateral action not only would endanger the proper exploitation of these huge oil reserves, which are vital to the economy of the littoral states, but could also bring severe damage to the environment of the Caspian Sea. In the meantime we should take into special consideration that the Caspian Sea is home to about 90% of the world's sturgeon

[1]For this information, see Encyclopedia Britannica, 1991, Vol 14, pp 256-7.

population, which are of the most valuable fish in the world. A lack of harmonization in this area could easily lead to destruction of this species[2].

The practice of the littoral states

In recent years there have been a lot of debates regarding the legal status of the Caspian Sea, mainly focussed around the question whether this enclosed body of water should be considered as a sea or lake ndeed, discussions about these concepts will not easily lead to a consensus among these littoral states, mainly because the rules applicable to these concepts are totally different. From the legal point of view it is difficult to consider the Caspian as a sea but on the other hand especially when taking into consideration its size, geographical characteristics as well as the special situation of the area, it is not fair to treat it as a lake either. In our view the Caspian Sea with its special characteristics and special situation is forming a unique body of water, which needs to be governed by a special regime reflecting this uniqueness based on rules such as, treaty provisions, the Law of the Sea, jurisprudence of International Court of Justice (ICJ), state practice, and regional political considerations, leading to an equitable solution.

Historically there are 4 main treaties concluded between Iran and Russia/USSR dealing with the waters of the Caspian Sea. In chronological order, there are as follows:

1. Treaty of Turkamanchai (10 February 1828)[3]

This peace treaty, which was concluded between Iran and Russia following a series of wars between two countries, indicated that only Russia had the right to keep warships on the Caspian Sea. (Article VIII)

2. Treaty of 26 February 1921[4].

Based on this treaty, freedom of navigation was established for both parties (Article II) but there is no indication regarding the delimitation of the sea or sea-bed. Under the provisions of Article XIV of this treaty, the URSS have right of fishing along the Iranian coastline.

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[2] From 1998 CITES (The Convention on International Trade in Endangered species of wild Fauna and Flora) has included sturgeons into its list 2, which means they are subject to export restriction and if export restrictions fail the CITES would impose an import ban at its next session next June in Paris. CITES was negotiated at an international conference in Washington D.C. in1973 and came into force in 1975. It has been ratified by 150 countries. It covers over 40000species of animals and plants.

[3] For details see : Nissman, David B., The Soviet Union And Iranian Azerbaijan 13, 1987. For the Treaty see : British and Foreign State papers 1827-1929, pp : 669-675.

[4] Recueil des Traités de la Société des Nations, Vol IX, 1992, pp. 400-412

3. The Treaty of Establishment, Commerce and Navigation between the URSS and Iran of 27 August 1935[5]

This treaty not only reaffirmed the freedom of navigation for both parties in the Caspian Sea but also established a 10-mile exclusive fishing zone. The other part of the sea remained open for fishing

4. The Treaty of Commerce and Navigation between the Soviet Union and Iran of 25 March 1940[6]

Under this treaty, and the supplementary notes attached thereto, the Caspian Sea was referred to as the "Soviet-Iranian Sea" and while reaffirming the 10 mile exclusive fishing zone for the parties, the rest of the sea was reserved to nationals of the Soviet Union and Iran only.

The provisions of the treaty contain more details regarding the navigation in the Caspian Sea[7], but again there is no reference to the sea-bed.

Following the disintegration of the Soviet Union in1991, the littoral states bordering the Caspian Sea increased to five countries, namely Iran, Russia, Azerbaijan, Kazakhstan and Turkmenistan. Apart from the different approaches of the littoral states towards the delimitation or common sharing of the sea, the discovery of vast oil and gas resources in the Caspian Sea increased the strategic importance of this area and led to the active involvement of foreign powers and international companies seeking their interests in the region. The presence of such powers also added entra political problems to the Caspian Sea region. There have been lengthy debates over the delimitation of the Caspian Sea between the States concerned highlighting the different interests that are at stake. With this general background let us now return to the objectives and the practice of the littoral States.

I. AZERBAIJAN

There are substantial proven oil and gas reserves under the sea-bed of the Caspian Sea claimed by Azerbaijan. It seems that most of these oil-deposits are located in this part of the sea. Some of them are also overlapping with the claims of Azerbaijan and Turkmenistan[8].

[5] 176, L.N.T.S., 299, (1937)

[6] British and Foreign States Papers 1940-42, Vol.144, London, 1952's ,pp. 419-435.

[7] See Momtaz, Djamchid, « Le statut juridique de la mer Caspienne », Espaces et ressources maritimes ,n° 5, 1991, pp.149-155

[8] For more details see : Harris, Andrew, « The Azerbaijan-Turkmenistan Dispute in the Caspian Sea », IBRU Boundary and Security Bulletin, winter 1997-1998,pp. 56-61

Based on these facts Azerbaijan considers the Caspian Sea as a "lake" subject to delimitation based on the "middle line method[9]. Furthermore Azerbaijan cites in support of its argument the soviet practice regarding delimitation of off-shore oil fields among its Republics before 1991 which is described as follows:

Soviet authorities divided the Caspian Sea into sectors as early as the 1950's. This approach was apparent in the activities of both the Soviet central government and the many separate ministries that were involved with Caspian activities, including energy, fishing, and transportation[10].

In accordance with this argument, Azerbaijan justifies its position towards the delimitation of the Caspian Sea into different sectors under the sovereignty of the individual littoral States. In line with this policy, Azerbaijan started signing oil concession agreement with oil companies across the world, mainly of west European countries and the United States.

This unilateral attitude not only provoked Russia and Iran protesting strongly against Baku but also due to the fact that most of the off-shore fields were overlapping parts of the Caspian Sea claimed by other newly independent states namely Kazakhstan and Turkmenistan, this practice was rejected by the latter States

II. KAZAKHSTAN

The access of Kazakhstan to the off-shore oil fields along its coast will rank this country among the major world oil producers in the future[11]. According to the latest estimates, the Kazakhstan's off-shore oil fields contain about 10 billion proven and 85 billion estimated barrels of oil[12]. One of the largest oil-fields of the Caspian Sea called Tengiz oil-field, is located on the off-shore area claimed by Kazakhstan. In April 1993 Kazakhstan signed a $ 20 billion, joint venture contract with Chevron Company for the exploration and exploitation of this huge oil field.

At present there is a lot of interest in the oil deposits of the sea-bed claimed by Kazakhstan, but uncertainty over the ownership of these fields has created serious problems for Kazakhstan, Azerbaijan and Turkmenistan which are heavily dependent on the oil deposits in the Caspian Sea.

Based on this background, Kazakhstan's trend is the application of the modified rules of the Law of the sea concerning maritime delimitation as embodied in the1982 United Nation on the law of the Sea, which would lead to the

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[9] Interfax news Agency, Moscow, 28/1197 (FBIS-SOV-97-019).

[10] Quoted in : Cynthia M.Croissant. and Michael P. Croissant, " The legal Status of the Caspian Sea : Conflict and Compromise". Oil and Geopolitics in the Caspian Sea Region, Michael P. Croissant and Bülent Aras, eds West Port, London, 1999, pp. 20-42.

[11] Delay, Jennifer, « Chief of new Kazak oil State firm Unveils Ambitious Goals » Pipeline News, n° 55, 13-19 April 1997..

[12] Cynthia M. supra note 10, p.32

delimitation of the Caspian Sea[13]. Kazakhstan argues for the establishment of internal waters. territorial waters and fishing zone or exclusive economic zone, appertaining to the littoral States[14]. Although this approach has not been approved by the other littoral States, it is believed that as long as it does not hamper the free navigation, which is important to Russia, it could establish a solid base for discussion.

III. TURKMENISTAN

Turkmenistan, in addition to its large natural gas reserves, claims some oil deposits under the seabed of the Caspian Sea in an area which overlaps with the claims of Azerbaijan.[15]

Indeed, in 1993 Turkmenistan was the first country to establish an exclusive economic zone in the waters of the Caspian Sea. In this respect, Turkmenistan extended the breadth of its territorial sea to 12 nautical miles and extended its exclusive economic zone to, the median line in accordance with the provisions of the 1982 Convention relating to the breadth of the territorial sea and the Exclusive Economic Zone [16]

Whereas the maximum width of the Caspian Sea is less than 200 nautical miles, according to the Turkmenistan practice, the whole Caspian Sea is covered by the Exclusive Economic Zone of the littoral States, which should consequently be divided between them. On the other hand, the unresolved problems relating to the overlapping areas claimed between the three newly independent States are major source of conflicts in the region. At present, the oil fields of Chirag, Azeri and Kypaz, located between Azerbaijan and Turkmenistan are claimed by the two countries[17].

IV. RUSSIA

Following a series of wars between Russia and Iran at the beginning of the nineteenth century, the latter country lost its control over the Caspian Sea. Following Russian Revolution, Iranian shipping rights were restored in the Caspian Sea on the basis of the 1921 and 1940 treaties. In addition on 21 December 1991 during the conference in Almata between CIS countries, all of the Parties agreed to respect the international obligations undertaken by the former Soviet Union.

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[13] The World Today, 59, June 1995, p. 120 Also see: The World Today, 51, 1995, p.119

[14] Gizzatov.V., « The Legal Status of the Caspian Sea" Oil & Caviar in Caspian Menas Associated, London, 1995, pp. 26-37.

[15] For more details see Harris, Andrew. Supra note 8 pp. 56-61

[16]: United Nations, The Law of the Sea : Official text of the United Nations Convention on the Law of the Sea : with Annexes and Index, New York, 1983,

[17] See Harris, Andrew, supra note 8, p.56.

Based on this background and citing the 1921 and 1940 treaties which still are in force, Russia at the beginning strongly rejected the claims of the newly independent littoral states towards the partition of the Caspian Sea into sectoral Parties.

In 1994, Russian Federation through an official letter to the UN Secretary-General titled "Position of the Russian Federation regarding the legal regime of the Caspian Sea"[18], rejected the position of Azerbaijan declaring :

> Unilateral action in respect of the Caspian Sea is unLawful and not be recognised by the Russian Federation, which reserves the right to take such measures as it deems necessary and whenever it deems appropriate, to restore the legal order and overcome the consequences of unilateral actions[19].

Furthermore, in 1995 during an official visit of the president of Turkmenistan to Moscow, President Yeltsin insisted that the Caspian Sea is an inland sea, is not subject to delimitation, and should be shared by the littoral States[20]. Although Russia was clearly threatening that, it could not tolerate the unilateral actions of the littoral states regarding the delimitation of the Caspian Sea, following the participation of Russian companies in different projects in Azarbaijan, Kazakhstan and Turkmenistan the position of Russia ironically shifted from "condominium" to the view of " sea-bed delimitation", which is completely in contrast with its previous position. Indeed this new approach seems to be more practical due to the fact that the treaties of 1921 and 1940 do not deal with the sea-bed and the problem of the oil resources located there which are the main motives for the delimitation. Nonetheless, currently Russia is trying to put forward the view that the surface waters be treated as a condominium for the purpose of free navigation but sea-bed be divided in accordance with the concept of "median line". this view is in contrast with the strategy of the other littoral States, that want to ban warships from the Caspian Sea.

However, in line with this Policy, Russia has delimited its sea-bed with Azarbaijan and Kazakhstan in the northern part of the Caspian Sea and is pushing other countries to do the same[21]. By means of 1998 agreement between Kazakhstan and Russia, the sea-bed has been divided between the parties while the surface waters, for the purpose of fishing and navigation, remained a condiminium.

Generally speaking Russia has abandoned its old policy regarding the joint utilisation of the Caspian Sea and is pushing towards the following objectives :

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[18] A/49/475, 5 October 1994.
[19] Ibid.
[20] Reuter, 18 May 1995, President Yeltsin's Statement.
[21] Isachenov, Vladimir, « Russia, Kazakhstan in Caspian Pact ». The Washington Post, 6 July 1998, p.8

1. To reserve its military presence through the joint utilisation of the water surface under the treaties of 1921 and 1940, which provides for the free navigation of vessels of all the littoral States.
2. To delimit the sea-bed between littoral states through a series of agreements.
3. To involve more Russian companies in exploitation of the oil deposits of the Caspian Sea and to reduce the presence of the western companies in the region.
4. To find a regional agreement for the protection of the environment and the protection of fish stocks, in particular those of the world famous sturgeon species which after oil resources is the main sources of income for the littoral States.
5. To control the oil and gas exports through Russian pipelines[22]. The passage of these routes through its territory not only strengthens its position in future negotiations, but also provides a long-term constant source of income to its economy amounting to billions of dollars

V. IRAN

Following a series of declarations made by the newely independent States of the Caspian Sea regarding the delimitation of that sea, Iran while protesting against these positions, organized a series of conferences in Teheran in which it tried to clarify the legal status of the Caspian Sea. Iran, in line with Russia, supported the argument that, based on the treaties of 1921 and 1940, the Caspian Sea has been treated as a unity. Consequently the delimitation of the sea would ran against the very nature of the treaties and the state practice of Iran and Russia displayed during the past 70 years[23]. The latest meeting of the Caspian deputy foreign ministers, which took place in February 2001 at Teheran could not lead to a solution upon Iran's request, the next meeting that was to be held during the month of March in Ashgabat, was postponed until April.[24]

Although Iran was insisting on the application of the two treaties and aimed of the joint exploitation of the energy deposits under the sea-bed, it became obvious from 1995 onwards that the trend of the other littoral States was rather towards the delimitation of the area concerned. Accordingly Iran which could play a major role in determining the future fate of the Caspian Sea resources, became the odd man out. Russia, while it was advocating the idea of the condiminium in line with Iran,

[22] See : The Capitol Hill Conference Series, « Caspian Oil : Pipelines and Polisics
[23] For more details see : Central Asia and The Caucasus Review, n°21, spring 1998; The Foreign minnistry of Islamic Repulic of Iran, Teheran.
[24] During the meeting of Caspian littoral states which was held in Teheran in 1992 « The organisation for co-operation between the Caspian Littoral States »(OCCLS) was established. The members approved that every six month the deputy foreign ministers of the concerned countries have had meetings and once a year between the foreign ministers.

nevertheless started at the same time negotiations with Azerbaijan[25] and Kazakhstan for the delimitation of the Caspian sea-bed and the transfer of these energy resources through its pipelines to the markets in Europe. Furthermore Russia in order to complete its strategy tried to settle the problems between Azerbaijan and Turkmensitan regarding the oil fields in dispute between them. This move not only increased the presence of Russian companies in the area concerned but also pushed Iran further into isolation.

From the beginning of 1998, Iran started to reconsider its position towards the Caspian Sea problem and in summer of 2000, president Khatami, during his speech in connection with the status of the Caspian Sea indicated :

> Iran expects a system of division that would leave it with a share of not less than 20% If the legal regime is to divide then the sea-bed and the surface should equally be divided[26]

Indeed, the departure from the idea of condiminium towards the delimitation of the whole sea, including the surface and the fishery resources touched upon the vital interest of Iran which, according to a recent interview with Mr.Abbas Maleki, Chairman of the International Institute for Caspian Studies, is creating a buffer zone to keep Russia from the lower areas of the Caspian Sea[27].

Furthermore, on 9 March 2001 Mr. Zanganeh, Iranian minister of oil regarding the exploitation from the Caspian Sea stated that:

> So far Iran had waited for the determination of the legal regime of the Caspian and had not started any explorations, but from now on we would proceed with activities in this field regardless of the Caspian's legal regime[28].In the latest visit of President Khatami to Moscow, which took place between 12and 15 March 2001, one of the topics for discussion was the problem of Caspian Sea which yielded in no concrete result. The Russians apparently did not agree with Iran's demand of 20% share from the Caspian Sea[29]. In the statement signed by the presidents of Iran and Russia two main issues were nevertheless highlighted : First the respect for the treaties of 1921 and 194, and second no further move for dividing the Caspian Sea. As it was discussed above, both countries have not acted accordingly[30].

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[25] In April 1998 Russia and Azerbaijan agreed to divide the sea-bed adjacent to their coasts into national sectors. See : www. Iranian.com/Guive mirfendereski/2001/March/index.html

[26] http:/www.payvand.com/news/01/mar/1112.htlm, p.4.

[27] Ibid.

[28] Ibid.

[29] Ibid. p.5

[30] Ibid p. 7

In sum one could say that the mixture of economic and political factors has created so many overlapping interests. Nonetheless, the trend of the other littoral states of the Caspian Sea towards the delimitation of the sea-bed based on a strict application of the equidistance-median line principle will damage the interests of Iran. This formula will reduce the Iranian share from 20% to about 13%[31].

Finally it should be noted that neither the newly independent States of the Caspian Sea nor the United States or the European countries want to be totally dependent on Russian pipelines. Iran should take this historical opportunity to improve its relations with the major players of the Caspian game. As the best option for the export of oil and gas from the Caspian Sea countries Iran can offer its facilities. In so doing, if could negotiate over the whole package including the delimitation of the sea-bed, fishery zone, free navigation for commercial ships and the construction of pipelines linking to the open waters of the Persian Gulf

CONCLUSION

In terms of oil resources, the Caspian Sea basin could be ranked second after the Persian Gulf with estimated reserves of up to 200 billion barrels of oil and significant gas reserves as well.[32] The presence of these oil fields introduced a new era of competition between the littoral states of the Caspian Sea. This competition was moreover intensified by the active interest displayed by countries from outside the region as well as the presence of many oil companies which, in most cases, are believed to influence the foreign, and even the domestic policies of the littoral states. Undoubtedly, the prudent utilization of these resources can bring prosperity to the littoral states while short-sighted behaviour could not only destroy this treasure, but easily lead to more conflicts affecting peace and security in the region.

Apart from the fish stocks, which are presently the main source of income for the population living around the Caspian Sea, most of the oil deposits are considered trans-baundary deposits to be shared by two or three countries. The lack of cooperation and harmonization of policies with respect to these resources will certainly damage the commercial extraction. As far as non-living resources are concerned, because two or three countries are likely to pump up oil from the same reservoir without taking coordinated technical measures regarding the preservation of that resource. This would certainly diminish future prospects and might well result in sever ecological threats,with a direct effect on the living resources. But also the living resources would suffer from such lack of cooperation and harmonization of policies, because of resulting threats of industrial pollution and overfishing. For instance, the annual sturgeon catch has already declined by more than eighty percent.

These circumstances call every effort to be made to promote cooperation and to remove misunderstanding, so as to create the necessary conditions for

[31] Ibid p.10
[32] See supra note 22,p.6

securing stability, peace and tranquillity in the region. Nonetheless, in order to achieve these goals and remove the present misunderstandings, it is necessary to clarify the rules applicable to the maritime disputes in the Caspian Sea. Particular attention should be paid in this respect to its special characteristics of this region, such as the presence of common reservoirs as well of living as of non-living resources. Due regard should also be paid to political factors.

Undoubtedly, any compromise regarding the legal statuts of the Caspian Sea requires the agreement of all five littoral States. In practice all of them have accepted the idea of arriving at a delimitation of the seabed, an issue on which the treaties of 1921 and 1940 provided little guuidance This common approach can be considered as a solid ground for future negotiations.

But even though the provisions of the 1921 and 1940 treaties between Iran and the former USSR do not directly deal with the sea-bed of the Caspian Sea, they nevertheless defines the regime of the superjacent waters, the living resources and, more important, they guarantee the freedom of the navigation. Under the established rules of international law, in particular the Vienna Convention of the Law of Treaties[33], the littoral States of the Caspian Sea can difficulty invoke the doctrine of *rebus sic stantibus* in order to abrogate these two treaties[34]. These Treaties have been concluded with the goal of ensuring the security and stability in the region, which is one of the main aims of the international law. Furthermore these treaties have been in force for more than 80 years and their mere abrogation without simultaneous establishment of another solid regime to replace it, might easily lead to even more chaos. However, under these treaties no distinction is made between merchant ships and war ships. The latter could still turn out to be a controversial question between littoral States. Indeed maybe a kind of prior permission or notification for the passage of warships could lead to a compromise.

Regarding the seabed, all of the littoral States are at present in agreement with the basic idea that it should be delimited. Russia, Kazakhstan, Azerbaijan, Turkmenistan are in favour of delimitation based on the application of the equidistance-median line principle.

Iran on the other hand argues in favour of a share of not less than 20%, while the strict application of median line would reduce Iran's share to a mere13%. Failing agreement, acceptable to all parties, the whole seabed should be divided among the littoral States based on international law in order to arrive at an equitable solution[35], as embodied in the provision of the 1982 Convention[36].

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[33] Vienna Convention on the Law of Treaties, 23 May 1969, multilateral, Art. 56,1155 UNTS 331

[34] Ibid., Art.62

[35] Fore more detailsabout equitable principles see Razavi Ahmad, Continental Shelf Delimitation and Related Maritime Issues in the Persian Gulf, The Hague, Martinus Nijhoff, pp.273-284.(1997)

[36] 1982 Convention, Arts 74,83

The procedure of delimitation based on international law in order to arrive at an equitable solution was followed by ICJ in dealing with the delimitation cases[37].
The jurisprudence of the ICJ and long-standing state practice, including that of Iran in the Persian Gulf, supports the submission that in order to achieve an equitable solution, the parties should take into consideration all of the relevant circumstances pertaining to the disputed area, such as oil deposits, trans-baundary living resources, state practice, political and strategic factors, e.a.[38]. The application of these criteria could finally lead to an agreement and provide solid grounds on which further cooperation among the littoral States could be based.

[37] For analysis of these cases : see Razazvi Ahmad, supra note 35,pp.201-208,234-236,294-304

[38] As already stressed by one of the authors elsewhere, these new provisions to be found in the 1982 Convention are sufficiently flexible to allow all these considerations just to be included. See Franckx,E. "Maritime Boundaries in the Baltic Sea: Post-1991 Developments", 28 Georgia Journal of International and Comparative Law pp. 249-266 (2000). As siscussed under chapter 1.

GEO-POLITICS OF THE CASPIAN REGION ENERGY, ENVIRONMENT AND (IN) SECURITY

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Geographically speaking, the Caspian region is centred on that inland body of water which is called a sea due to its size (app. 371,000 km^2), and includes five independent states that surround it: Russia, Azerbaijan, Turkmenistan, Kazakhstan and Iran. The contemporary usage of the term 'the Caspian Region' implies a 'geopolitics determined by peculiarities of geology, [that is] huge natural resources' (SHIMIZU, 1998), which has led to the formation of a region defined by oil and gas (FULLER, 1997). The result is the emergence of a new strategic region encompassing most of Central Asia, the North Caucasus, and Transcaucasia as well as such nearby states as Turkey, Iran, Afghanistan, Pakistan and even China. Thus, the Caspian Region, connecting two distinct areas of the former Soviet Union, the Caucasus and Central Asia, carries all the geopolitical weights and instabilities of both, in addition to having unique problems connected with its huge hydrocarbon reserves and multi-sided international rivalry to obtain the greatest benefit from them.

The area remains of profound interest and vital concern for Russia, which is ever sensitive to external influence in, or the possibility of actual physical threats to the region. For years, the region's outlets to the world were controlled by and from Moscow. Today, as a result of the USSR's disintegration and regional instability combined with geopolitical realignments, the number of political, economic and military actors who can influence the region's future has increased manifold. Within the emerging geopolitical equations, various factors contribute to the newly independent states' geopolitical reorientation away from their historic Russian bond.

These developments, however, have caused anxiety, to say the least, in Russian decision-making circles. They came by the end of 1992 to the conclusion that 'the continuing independence of the Caucasian and Central Asian nations and the reorientation of their foreign policy, economic and transportation strategies toward the south will considerably undermine Russia's great power status' (KASENOV, 1995). Losing its monopoly in regional transport and communications due to projects to build oil and gas pipelines and highways in the southern direction would also lead to the loss of direct access to the region's rich natural resources and strategic metals. Finally, in addition to the decrease in the overall role of Russia in the region, many Russians seem psychologically incapable of accepting a change in the status of the newly independent states. They continue to see the former Soviet southern border as Russia's outer frontier (GLEASON, 1999). Consequently, Russia, since 1992, has been actively pursuing a policy to re-

establish its economic, political and military control over the Caucasus and Central Asia.

Nevertheless, the area is also of increased relevance to Turkey, Iran, the US, China and Western European countries for various reasons. The existence of mostly Western-based multinational oil companies further complicates the situation. The West's interest in gaining access to Caspian oil and other raw materials through market forces is clear, as is its interest in protecting its investments in the region. Consequently, what happens in the Caspian Region affects Western interests directly.

The possibility of transferring large-scale oil and gas deposits to industrialized Western Europe raises hopes for regional economic development and prosperity. At the same time, however, 'the belief that whoever secures the major share of oil pipeline transit will gain enhanced influence not only throughout the Caucasus and Central Asia but also on a global political scale', highlights the concerns about the future stability of the region (BLANDY, 1998). In terms of regional geopolitics, 'control of the Caspian, or even freedom of movement upon it, represents a prize of considerable value', and the competition for influence among regional states, with its ideological, religious and political dimensions, lowers the threshold of the possible armed conflicts erupting in the region (SCHOFIELD and PRATT, 1996). Consequently, the rivalry over the Caspian energy resources, interacting with many regional conflicts surrounding the area and with the international efforts to solve peacefully these conflicts, elevates the region into a unique geopolitical interest harbouring various threats to regional and wider international peace and stability.

ENERGY RESOURCES IN THE CASPIAN REGION

During the Soviet era, most of the Caspian remained unexplored, primarily because the SSCB had lacked adequate technology to develop its offshore oil and gas reserves and also kept them as a strategic reserve (SHIMIZU, 1998). Nevertheless, the major discoveries that were made in Azerbaijan and Kazakhstan during the Soviet period indicated large reserves of oil. The production of these can be increased with additional investment, new technology and the development of new export outlets. The total proven oil deposits in the Caspian region are between 16 and 32 billion barrels, comparable to the deposits in the US and in the North Sea. With potential reserves of as much as 200 billion barrels of oil, the Caspian region could become the most important player in the world oil market over the next decade. In addition Kazakhstan, Turkmenistan and Uzbekistan, with estimated 236-337 trillion cubic feet proven gas reserves, rank each among the world's 20 largest natural gas countries. With these proven and prospective reserves, the area, although not another Middle East as some had hoped, could well be another North Sea.

Among the littorals of the Caspian Sea, Iran is the least interested in the immediate development of Caspian oil deposits. It has oil reserves elsewhere which it is unable to utilise to their full potential due to the American embargo. Thus, Iran is agitated to see development of new commercial rivals and wishes to benefit at least by the transportation of that oil, both materially and also as a way to loosen the US embargo.

Russia's attitude is similar to that of Iran. It feels no haste to develop the Caspian Sea reaches as it already has large proven reserves and production capacity based on its Siberian oil and gas. Moreover, the Russian part of the Caspian shelf, provided that it would eventually be divided into national sectors, is not very promising in oil reserves (though they are not yet fully developed). Furthermore, as one of the more important oil-exporting countries, Russia, like Iran, would not be happy to see new export rivals emerging into the world oil market.

Turkmenistan is not concerned with urgent development of its Caspian oil reserves. It has large natural gas reserves elsewhere in the country and its Caspian coast is the least explored. Turkmenistan's short-to-mid term objective is to develop an independent export infrastructure based on natural gas without having to pass Russian territory. Nevertheless, Turkmenistan, too, is interested in the division and mid-to-long term prospect of Caspian Basin oil and gas.

Azerbaijan and Kazakhstan, on the other hand, have been interested more than others in the immediate development and export of Caspian oil as most of the proven oil resources in the area are concentrated near their shores and 'they are in need of hard-currency funds that will come from the export of oil', which would enhance their economic and political independence from Russia (AKIMOV, 1996).

However, none of the countries of the Caspian Sea Region has the necessary capital to explore and exploit the regional hydrocarbon resources, and all will need foreign investment in the foreseeable future. In any case, apart from the Caspian Sea littorals, a number of countries will have to be included in any project, due to either the possible transit of oil through their territory or to supply the necessary investment. Among others, Turkey, Georgia and Armenia stand out as most important players in the first respect, and Iran, Bulgaria, Greece, Afghanistan, Pakistan and China may potentially be involved. The Western European countries and the US should also be counted, since necessary funds for the projects would eventually come form them. Therefore, before tapping the full benefits of Caspian oil and gas reserves, various legal, political and strategic issues have to be tackled and solved to the satisfaction of at least the majority of the littoral states, regional countries, Western oil companies and their governments.

THE LEGAL STATUS OF THE CASPIAN

During the Soviet period, most of the Caspian coastline, apart from a small Iranian portion in the south, belonged to the Soviet Union. The collapse of the Soviet Union, however, left five states sharing the coastline and claiming authority onto parts of the Sea area. Although it is not difficult to see the urgent need for an explicit

definition of the legal status of the Caspian, the ongoing discussion among the riparian states has tended to dwell on the sea/lake controversy while the real problem appears to be that of sharing the profits (AYDIN, 1999).

According International Law the choice regarding the status of the Caspian is either common ownership of, or joint sovereignty of all the littoral states over the Caspian, or delimitation based on some agreed upon formula. However, there is no direct historical precedent, which can help to illuminate a solution to the status of the Caspian. There is, of course, the fact of an exclusive Russian naval and military presence for about 200 years and the signing of a number of treaties between Russia/the Soviet Union and Persia/Iran concerning freedom of navigation, maritime activity and trade in the Caspian Sea. While Russia has been quick to use the 1921 and 1940 treaties to make its point that the Caspian is an object of common use by the riparian states on an equal basis. Others, particularly Azerbaijan, have increasingly emphasised that these treaties are not applicable to the present problem of defining the status of the Caspian, because they had only applied to navigation and fishing leaving the problem of the exploitation of mineral resources on and under the seabed out of their scope. Besides, these treaties were all agreed when there were only two littoral states. The emergence of new states, at least, throws the validity of these treaties into question.

According to the original position adopted by Russia with regard to the status of the Caspian, which was also supported by Iran and Turkmenistan, it was argued that the Law of Sea could not apply to the Caspian since it has no natural connection with other seas; that joint utilisation was the only way forward; and that the legal regime of the Caspian cannot be changed unilaterally. Russia further advocated a 20-mile territorial waters plus an additional 20-mile exclusive economic zone leading to common ownership of the central area of the Caspian by all riparian states. Russian claims were based on the argument that both the 1921 and 1940 treaties and the Almaty Declaration of 21 December 1991 require from the riparian states to respect the present status of the Caspian. This Russian position was delivered to the UN on 5 October 1994, accompanied with a note that 'unilateral action in respect of the Caspian Sea is unlawful and will not be recognised by the Russian Federation, which reserves the right to take such measures as it deems necessary and whenever it deems appropriate to restore the legal order and overcome the consequences of unilateral actions' (AYDIN, 2000)

In December 1996, however, Russia declared, that as a 'compromise', it was ready to recognise a 45-mile 'near-shore, and the littoral states jurisdiction over the oil fields whose development has already started or is about to start'. Still, the navigation rights, management of fisheries, and environmental protection were to be jointly exercised and an interstate committee of all boundary states was to license exploration in a joint-use zone in the centre of the Caspian beyond a 45-mile exclusive national zone (SHIMIZU, 1998). Russia's position regarding the legal status of the Caspian has further fluctuated with the passage of the time, and there have been conflicting signals from different government agencies. Notably, the position of the Foreign Ministry contradicts the position of the Ministry of Fuel and

Energy. The latter supports contracts guaranteeing the participation of Russian oil companies. The Foreign Ministry on the other hand regards Russia as the regional superpower and the Caspian a 'Russian lake'. It is also alarmed by the projects to circumvent Russia in energy transportation from the region. The Russian Foreign Ministry has, therefore, worked for a legal status that would assure that any project for developing Caspian resources could only proceed with the participation and control of Russia. Apparently, 'expanding Russia's influence in the area of energy production' and transportation was seen as an 'important tool for re-establishing Russia's predominant role in the former Soviet geopolitical space' (SHOUMIKHIN, 1996).

In contrast to the Russian position, the Azeri position was described as a 'border lake' concept with sectors formed by central median line and internal boundaries, which correspond to international borders of the Caspian states. Accordingly, each riparian state in its own sector would have exclusive sovereignty over biological resources, water surface, navigation, and exploitation of the seabed. At times, Azerbaijan also aired 'open sea' concept with a 12-mile territorial waters and adjoining exclusive economic zones not exceeding 200 miles, in agreement with a central line principle (BLANDY, 1998). Azerbaijan's position is generally supported by Kazakhstan, with a variation regarding the exclusive economic zones formed by central line equidistant from points on coastline. Accordingly, Azerbaijan and Kazakhstan in a unilateral manner have already divided the Caspian to suit to their own designs, though Iran, Russia and Turkmenistan object to such moves.

Recent negotiations between the Russian Federation and Azerbaijan have indicated that, perhaps as a result of pressure from Lukoil, there is a possibility that the previous stance taken by Russia on the common ownership issue may become less rigid, adjusting towards the Azeri position of the 'border lake' concept. The Russian approach to Azerbaijan could further be modified if the negotiations involving Russian oil companies in the exploration and exploitation of the central part of Caspian Sea proceed favourably to Russian interests.

Although Turkmenistan had earlier supported the Russian position on the Caspian, its position remained somewhat ambiguous since February 1997, when it announced that the Azeri and Chirag oil deposits, which had been exploited unilaterally by Azerbaijan, were actually situated on Turkmenistan's territory. Since then Turkmenistan has claimed full rights to Azeri and Kyapaz oil deposits and partial rights to the Chirag oil deposits (BLANDY, 1997). However, the lack of Russian support for Turkmenistan has led the latter to search for a deal with Azerbaijan, which now seems quite possible. They issued a statement in February 1998 to the effect that both countries agreed that the Caspian Sea between Azerbaijan and Turkmenistan would be divided along the median line, but disagreement over where to draw that line continue.

Iran continues to insist on a condominium solution, to protest against the plans to construct underwater pipelines across the Caspian, and favours the transportation of oil by the existing pipelines through the territory of Iran and Russia. Nevertheless, it is clear that Iran can accept sectoral division of the Caspian

if its interests are taken into account. Indeed, Tehran has already somewhat softened its attitude towards Azerbaijan after the latter awarded Iran exploration rights in Shah-Deniz.

Behind all these controversies lies the fact that the size of the yields from exploitation rights for individual states depends on the status of the Caspian. If the Caspian is divided among the littoral states, Azerbaijan and Kazakhstan will have the largest share of proven oil deposits and exploitation rights. Under the 'border lake' concept in particular they will get more than double the amount that Russia will. Under the 'enclosed sea' concept, however, the gap will somewhat be reduced, while under the Russian 45-mile proposal, most of the Azeri offshore oil will be transferred to collective ownership.

Moreover, underpinning the Russian position is the argument that it has certain 'rights' in the newly independent states, because their economies were developed with Russian financial support and expertise. Russia must have 'access to the resources of the CIS', declared in 1994 the then Russian Fuel and Energy Minister Yurii Shafrannik, because 'we, by virtue of our labour, mind, [and] energy have created all this' (SCHOFIELD and PRATT, 1996). Other littoral states, however, are eager to realise their potential wealth from the Caspian in order to stabilise both their shaky economies and domestic politics and to distance them from the Russian sphere of influence.

The latter endeavour is supported by the US, which continues to strongly object to the condominium approach, as it will bring Iran into the picture. Given the fact that most of the oil companies operating in the region are American and, that the Iran-Libya Sanctions Act of 1996, blocks them from participating in any project for Caspian development involving Iran, the views of the US government assume greater importance. It is obvious that, in the final analysis, any Caspian compromise will require the agreement of the five littoral states and at least half a dozen other regional players with conflicting political and economic goals. In the absence of an agreement, however, a worst-case scenario might not exclude the possibility of a military confrontation between rival states.

PIPELINE ROUTES AND REGIONAL RIVALRIES

One of the peculiar features of Caspian oil resources is the fact that the countries most interested in early exploration and transportation of oil and gas are landlocked and have to rely on the co-operation of their neighbours to be able to do so. As each country has its preference regarding how the oil and gas should be transported to the markets, and as external powers are trying to ensure that the road selected best meats their needs, the issue assumes an importance quite separate from that of production. The transportation question manifests itself in both political and economic considerations because 'the actual problems of the region involve factors that cannot be judged in terms of economic costs alone' (SHIMIZU, 1998). Therefore the region's political and strategic conditions assume prominence in the discussion of

which route should be chosen for transportation of hydrocarbon resources out of the region (AYDIN, 1996).

The initial power vacuum created in the region by the collapse of the Soviet Union has pulled most of the regional states and external powers into a dangerous power/influence game in a rapidly changing Eurasian scenery, and the competition had earlier displayed images of the 'Great Game'. While Russia welcomed initially, for the first time, Turkish influence in Central Asia and the Caucasus as a counterweight to Iranian dominated pan-Islamism, those views have by now shifted as Turkey moved more assertively then Iran to supplant Russian influence in the region. Accordingly, the fear that Turkey might have become an agent of the West in the region to dislodge and displace Russian influence took hold within various Russian circles (AHRARI, 1994). Thus, Russia, getting increasingly edgy about Turkish intentions, eagerly moved to re-establish its place within the Caspian Region as a dominant actor. In this move political, economic and military pressures have been used extensively, and Russian pressures on the newly independent states went as far as to argue that stability in the Central Asia and the Caucasus would be threatened without a Russian presence in the region.

At the same time, Russian-Iranian relations have rapidly developed after an initial suspicion and reached an all-time high, with Iran becoming not only an important trading partner and profitable arms customer but also an important exponent of Moscow's interests in the region. In return for Russian leniency towards Iranian moves in Central Asia and Afghanistan, as well as support in the Gulf, Iran pledged 'not to do anything that could undermine Russia's ability to maintain and strengthen the CIS and to pursue an active security role in Central Asia and Caucasus', as well as to refrain from fuelling Islamic radicalism in the region (SAIKAL, 1995).

Under the current geopolitical calculations, Russia is keenly interested in retaining, or recovering, its political influence over the Caspian Region. In order to acquire this leverage, Russia has been insistent on the northern line (Baku-Novorossiisk) as the main transit route for the future oil from the Caspian as this would ensure Moscow's exclusive and strategic control over the region's resources. However, the existing Russian pipelines system, though currently under-utilised, 'do[es] not have the capacity to absorb all the oil and gas the Caspian region could produce' (SHIMIZU, 1998). They were originally designed to link the SSCB internally, not to perform as export outlets. An additional limitation is that the oil has to be transported by tankers from Novorossiisk through the congested and ecologically sensitive Bosphorus to get to the world market. Added to this are earlier Russian attempts to use its virtual monopoly on export routes as a means to control all regional issues, thus highlighting the fact that 'the Moscow-centric pattern of post-Soviet infrastructure renders energy-rich states dependent on Russia despite their own reserves' (HALE, 1999).

The US, Turkey, Georgia and Azerbaijan are opposed to the Russian northern route and prefer the western route (Bakü-Ceyhan), which will transport the oil and gas directly to the Mediterranean. Other various projects notwithstanding,

the main competition appears to be between the northern and the western routes. What is at stake is not only oil and gas transit revenues, but more importantly, securing and maintaining influence in the Caucasus and Central Asia, to which end the pipeline network is considered to be one of the key factors. Quite clearly, the western route would give Turkey greater influence than to Russia, while the northern route could greatly benefit Moscow.

The direction to be chosen for oil and gas transportation from the Caspian region depends on a number of factors. Geopolitical considerations of the major World powers and local security problems are as important as (if not more than) financial considerations, geographic location of the main consumers and the existing infrastructure. Obviously, local conflicts, political instability and lack of regional co-operation have slowed down the development of Caspian oil and gas resources and export routes. Many of the proposed routes pass through the Caucasus, where the wars in Chechnya, and frozen conflicts within Georgia and between Armenia and Azerbaijan, have obstructed their development.

The shortest route for a pipeline from Azerbaijan to the Mediterranean is through Armenia and eastern Turkey. However, since the still-unresolved Nagorno-Karabakh conflict makes this route impossible in the near future, and since the US opposes passing through Iran, Georgia has become the only possible route for the western line. But, Georgia, too, is engulfed by a number of frozen internal conflicts, a situation that is obviously in Russia's favour if it remains so. Thus, Georgian President Shevardnadze escaped assassination attempts in 1995 and 1998, and survived a short-lived military uprising in October 1998. Shevardnadze himself blamed them on forces opposed to the construction of an oil pipeline across his country.

As the rivalry between the northern and the western routes heightened, the leaders of Turkey, Georgia and Azerbaijan made several announcements to the effect that there would be no other options for transportation of oil, but through the territory of Turkey. Finally, on 29 October 1998, the presidents of Turkey, Azerbaijan, Georgia and Kazakhstan signed the Ankara Declaration, strongly confirming the accomplishment of their determination in realising the Bakü-Ceyhan as the main export pipeline project. The US government, too, openly put its weight behind the Turkish option, because it passes through pro-American countries and would bind them closer to each other and to Western interests. Moreover, it would also secure Turkey's role as a major player in the Caspian region, which, in turn, would boost the status of a loyal NATO ally, who could check the influences of Iran and Russia in the region.

If the Bakü-Ceyhan pipeline is built and put into operation, its main effect will be the weakening or even the complete loss of economic and transportational dependence of the Central Asian and Caucasian states on Russia. Azerbaijan, Kazakhstan and Turkmenistan will emerge as new competitors to Russia in the exports of oil and gas to world market, and will use the money thus obtained to enhance their political independence from Russia. The role of the Western states, whose oil and gas companies will eventually provide necessary investments, will

increase, as will the role of Turkey. On the other hand, the perceived decrease in Russian influence or outside attempts to isolate or eliminate Russia in the Caspian Region can easily become counter-productive, and may quickly encounter an asymmetric response potentially destructive to the stability of regional security.

ENVIRONMENTAL AND ECOLOGICAL ISSUES

The World's attention has been attracted to the Caspian region mainly because of regional rivalries over highly explosive issues of oil extraction, transportation and profit sharing. However, there is another, equally important, danger about which politicians and oil-interests generally keep silent namely: the ruin of the Caspian's unique ecosystem accompanied by an irreversible environmental catastrophe. This is due to the total lack of respect for overall regional development and the long-term violation by the Soviet Union of the generally accepted environmental norms. The present rush of Western oil companies to, and the lack of control over oil exploration operations in the region, only help to exacerbate the situation.

The general ecological situation throughout the region is already beyond recovery. In addition to the rising sea level and flooding of coastal areas**,** there is the problem of increasing saturation and greasiness of the soil. In addition to actual flooding of arable land, an overall population of 700,000 people lives in danger zone and need to be evacuated. It is predicted that by the year 2010 the water level will rise by further 25 meters. As a result of pollution and the upheaval caused by hasty exploration of the coastal shelf and development of offshore oilfields, various forms of aquatic life are facing extinction. Moreover, the Azerbaijani coastline has now been declared unsafe for humans, because the concentration of hydrocarbon waste is three times than the permitted norm.

All of this large-scale environmental and ecological damage underline the need for an international authority to enforce compliance with appropriate environmental norms in the Caspian Basin. However, the ongoing dispute over access to resources presents a major obstacle to effective management of such problems, particularly at the supranational level. Thus, the negotiations on the legal status of the Caspian Sea are intertwined with environmental concerns.

Environmental questions surrounding the Black Sea in general, and the Bosphorus in particular, have also become a factor in the choice of export routes for Caspian oil. The ports of the Black and Baltic Seas were the principal outlets for the Soviet Union's, oil export. After the collapse of the USSR, the Black Sea has remained the largest outlet for Russian oil exports. Exports through the Bosphorus have grown since 1991, and there is a rising concern that projected Caspian Sea export volumes will exceed the capacity of the Bosphorus to accommodate the tanker traffic. Of about 50,000 ships per year that pass through the Straits, 60 % are already tankers. If Novorossiisk is chosen as the outlet for the main AIOC line, to which must be added the oil already coming from Kazakhstan by road, the CPC line, and the Baku-Supsa line, the number of tankers will increase sharply causing more risks and delays (CROW, 1998). To solve the anticipated problems in the

Bosphorus, Turkey has already issued new navigational rules in November 1998 that limit shipping in the Straits area. It also plans to install new radar and navigation systems to improve the safety and administration of navigation in the Straits. However, these precautions will not be sufficient to curtail the expected increase in tanker traffic through the Bosphorus because of international rules governing the right of passage in the Straits. The only way to avoid further congestion would be the development of alternative export routes that bypass the Straits.

CONCLUSIONS

In the Caspian Region, energy politics and security are closely linked with geopolitical analysis of the regional and extra-regional powers. Since the collapse of the SSCB, the region has become the scene of a quadruple international struggle for control of its energy resources. The parties to this struggle are: the Russian Federation, which aims at establishing its dominance over the region, other countries of the region that try to shun Russian domination, international oil companies backed by their governments, and neighbouring countries, such as Turkey and Iran, striving to enhance their regional influence and standing.

The local struggle in which each country tries to prevail over the others as to who owns what and how much, presents rather bewildering conflict possibilities. Combined with the transportation of oil from the region, it rapidly became a major international problem with alternative doomsday scenarios. None of the options is trouble-free as 'they all either pass through politically unstable areas, involve high costs, or are politically risky because they offend the strategic sensibilities of one or another of the regional powers' (FORSYTHE, 1996). In the final analysis, the choice of routes will have major strategic, political and economic consequences not only for the countries of the Caspian Basin, but also for wider Eurasian and Middle Eastern geopolitical calculations with global repercussions.

The exploitation of the regional energy resources is crucial to the newly independent states of Central Asia and the Caucasus not only for economic development and integration into world economy. It may also be the only way for long-term political stability and increased independence. The increasing independence of the countries of the Caspian Region will result in the weakening of Russian power, making it difficult for Russia to reassert its hegemony over them.

Moreover, the question of how growing oil and gas revenues will be put to use will have a significant effect on both domestic political stability of energy-rich countries and on intra-regional relationships in the region, where there have traditionally been a number of unsettling factors including ethnic conflicts. The conflict between Azerbaijan and Armenia, as well as the Abkhaz and Ossetian secessionist movements in Georgia, for instance, will be influenced by the development of Caspian oil. In short, whoever controls the energy economy in the Caspian Region will determine in the mid-to-long term the destiny of the region, shaping its domestic and international linkages. Hence the stakes are high and vital

for regional states and their neighbours as well as the wider international community.

REFERENCES

AHRARI, M.E., 1994. The Dynamics of the New Great Game in Muslim Central Asia. Central Asian Survey, Vol. 13, No. 4.

AKIMOV, A., 1996. Oil and Gas in the Caspian Sea Region: An Overview of Cooperation and Conflict. Perspectives on Central Asia, Vol. 1, No. 5, June.

AYDIN, M., 1996. Turkey and Central Asia: Challenges of Change. Central Asian Survey, Vol. 15, No.2.

AYDIN, M., 1999. Regional Security Issues and Conflicts in the Caucasus and the Caspian. In: K. R. Spillmann and J. Krause (eds.), International Security Challenges in a Changing World, Peter Lang, Frankfurt.

AYDIN, M., 2000. New Geopolitics of Central Asia and the Caucasus: Causes of Instability and Predicament, Center for Strategic Research, Ankara.

BLANDY, C.W., 1997. The Caspian: A Sea of Troubles, CSRC Report S31, Royal Military Academy, Sandhurst.

BLANDY, C.W., 1998. The Caucasus Region and Caspian Basin: Change, Complication and Challenge, Royal Military Academy, Sandhurst.

CROW, P., 1998. Pipeline Politics, Oil and Gas Journal, Vol. 96, No. 11, 16 March.

FORSYTHE, R., 1996. The Politics of Oil in the Caucasus and Central Asia, IISS, London.

FULLER, G., 1997. Geopolitical Dynamics of the Caspian Region, Caspian Crossroads, Vol. 3, No. 2.

GLEASON, G., 1999. The Central Asian States: Discovering Independence, Westview, Boulder.

HALE, H.E., 1999. Independence and Integration in the Caspian Basin, SAIS Review, Vol. 19, No. 1.

KASENOV, O., 1995. Russia and Transcaucasia: Oil, Pipelines, and Geopolitics. In: Sagdeev R. Z. and S. Eisenhower (eds.), Central Asia: Conflict, Resolution, and Change, Center for Political and Strategic Studies, Washington.

SAIKAL, A., 1995. Russian Policy toward Central Asia and the Middle East. In: Peter Shearman (ed.), Russian Foreign Policy Since 1990, Westview, Oxford.

SCHOFIELD, C., PRATT, M., 1996. 'Claims to the Caspian Sea', Jane's Intelligence Review, February.

SHIMIZU, M. (ed.), 1998. IDE Spot Survey: The Caspian Basin Oil and Its Impact on Eurasian Power Games, Institute of developing Economies, Tokyo.

SHOUMIKHIN, A., 1996. Economics and Politics of Developing Caspian Oil Resources. Perspectives on Central Asia, Vol. 1, No. 8, November.

ECOLOGICAL AND FISHERY PROBLEMS OF THE SEA OF AZOV

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The United Nations Conference on Environment and Development held in June of 1992 in Rio de Janeiro advanced a conception of the stable development which was ratified by most member states of the UNO. This conception envisages a harmonic development of the society and economy, provides for the use of natural resources with regard to the conservation of environment, of biodiversity of vegetable and animal life for future generation. When this conception was adopted immense anthropogenic transformations of the climate, land and water ecosystems had already occurred. Now, a decade later, having entered a new millennium, we have to take stock of what has been irretrievably lost and what has remained more or less unharmed and to think of what should be done in order to preserve (and, possibly, restore) the environment. Furthermore, it is desirable to outline urgent problems that should be resolved in the nearest future. Of course, such a vast problem can be considered only generally and, preferably, in regard to individual regions such as the Azov Sea basin (the sea proper and that part of its area which is defined by the Pan-European Codex as the "coastal zone").

The Azov Sea is one of the best studied parts of the World Ocean which, due to its geological history, physico-geographical and climatic characteristics, possesses a number of unique specificities: small area, insignificant depth and volume, poor water exchange with other seas, high importance of the river flow in the formation of the oceanographic (salinity, gas, biogenic and hydrochemical regimes and other parameters) and biological (composition of its inhabitants, productivity, ecological relationships) aspects of its ecosystem. Over 150 years ago a well-known specialist, who studied the southern seas of Russia, N.Z. Danilevski wrote: "a favorable combination of land, water and atmosphere " have created in the Azov Sea such advantageous conditions that "it is hundred times richer in fish than the Caspian Sea" (DANILEVSKI, 1871). Indeed, even in the mid 30s of the last century over 300 th. tons of fish, i.e. 85 kg per ha were caught in this sea which was the highest value both for the seas in the USSR (ZENKEVICH, 1963) and the World Ocean (MOISEEV, 1969). It should be kept in mind that in those days the fish stocks were used incompletely and the catches could have been nearly twice as high (VOLOVIK, 1985). The bulk of the fish caught was represented by anadromous fishes whose natural reproduction occurred all over the 600 th.ha of the spawning grounds, that is to say to each 1 km^2 of the sea area there belonged 10 ha of spawning grounds of anadromous species. Also the marine fishes constituted an important part of catches.

The low salinity of the sea (9-15‰) determined a quite specific composition of its biota, provided for a propitious combination of habitats for the organisms of the freshwater, brackish and marine complexes as well as a high

productivity on all the trophic levels (KARPEVICH, 1960, KARPEVICH, 1973). Owing to these and some other factors the Azov Sea seemed to be an inexhaustible source of valuable food resources. This is a description of what the Azov Sea used to be.

Man-produced changes in the ecosystem of the sea and its biota started as long as the Middle Ages. But these changes became really intensive in the early 50s of the 20th century, when not only the two principal rivers of the basin – the Don (in 1951) and the Kuban (in 1967) but also their tributaries and many small rivers were spanned by dams and many reservoirs were constructed intended for the control of flow, both seasonal control and over many years. The energy production, agriculture and the communal services, industrial enterprises and other branches of economy began to develop rapidly and the natural resources of the region were intensively made use of. It should be stressed that all those activities neglected requirements concerning preservation of the environment and the marine ecosystem, thus giving rise to a great deal of ecological and fisheries-related problems (BRONFMAN et al., 1979, KARPEVICH, 1960, VOLOVIK, 1985) the main of which were as follows.

1. The blocking of access of the anadromous fish breeders (sturgeons, shads) to the spawning grounds located upward of the dams.
2. A change in the hydrograph of the surface flow when the spring flooding no longer occurred but the volume of the river flow increased in the summer and winter low-water periods. This led to the breaking up of the reproduction mechanism for mass anadromous fish species (pike perch, bream, carp, etc.) in areas earlier Flooded in spring. During the last 50 years only 4 times the spring flooding by the Don waters was observed whereas prior to hydroconstruction such flooding ocurred in 85% of all cases. Concurrently, with these changes further ploughing up of land took place for which reason even in the years with spring flooding the reproduction of anadromous fish species progressively decreased. The discharge into the sea of the water flow with biogenous and solid components was disturbed reducing productivity of the sea, causing a redistribution of productive zones and certain specificities in the accumulation of sediments, transfer of bottom sediments and in the gas regime of the water body with corresponding consequences for the biota.
3. Numerous water intake facilities have led to death of considerable amounts of fry of valuable fish species whose abundance now equals more or less the quantity reared at fish farms.
4. Intensive development of the communal facilities and agriculture, of industry and transport in the region meant an increase in irretrievable intake of the river flow, not to mention the ever-increasing pollution of the water column and sediments in the rivers, water reservoirs and the Azov Sea with mineral oil products, phenols, heavy metal salts, organochlorine and phosphoroorganic pesticides and other biologically active substances; an increase in the discharge of biogenic elements is also observed. Concentrations of certain pollutants frequently exceeded maximum permissible concentration (MPC) dozens and

hundreds of times. Under such conditions further lowering of the productivity of all biota communities in the Azov Sea, disturbances in the maturing of fish and other hydrobionts and even cases of mass death were observed (KORNIENKO et al. 1998).

5. A substantial detrimental effect was exerted by direct human activity on the shore of the sea and in the sea itself. One may mention here the oil and gas prospecting, drilling of exploratory and industrial pits, cleaning and deepening of the access canals and port areas, discharge of polluted sediments on marine dumping sites etc. The scale of ecological consequences of e.g. sediment dumping can be estimated by changes over the period from mid 1950s to early 1980s in the sediment structure in the western half of the sea. The shelly and sand-shelly sediments, which had been predominant, were silted over whereby the main spawning grounds for Azov gobies were lost which were the main consumers of the zoobenthos and the preferred feeding objects for the predatory fishes such as pike perch, great sturgeon, turbot as well as an important commercial species (their maximum annual harvest exceeded 90 th.t).
6. Noteworthy is also an increase in the biological pollution of the surface flow and the sea itself. Here two processes are observed: the microbiological pollution (the quantity of drinking water has been deteriorating and the recreational usefulness of the coastal zones has been diminishing in view of a risk of various diseases) and the intrusion of exotic organisms. The latter process can be deliberate serving to increase fish productivity of the region (for example, introduction of plant-eating fish species, of mullet) or it can be an accidental intrusion whose consequences can be quite contrasting. Thus, the crab *Rhythropanopeus harrisi* has become a wide-spread feeding object, whereas ctenophore *Mnemiopsis leidyi* disturbed the functioning of the pelagic feeding system and led to a lot of other adverse ecological-economical consequences (VOLOVIK, 2000).

As a result of the whole complex of the negative ecological transformations, the productivity of the Azov Sea has sharply dropped over the last 50 years. The catches of fish have diminished from 150-220 th.t in the 1960s - 1980s to 15-20 th.t by the end of the century. This is what we have now.

Many of the above-mentioned consequences were not at all unexpected. As an example one may cite a long-term forecast of the development of the situation in the Azov Sea region which was published back in 1955 (KARPEVICH, 1955) and whose validity was fully confirmed by the end of the 1980s. Many times there have been attempts at the solution of various ecological problems which were undertaken in many regions on the level of the central government and of various departments. However, all these attempts were sort of shy, they were not financially and materially supported, were slowly implemented and, as a rule, they did not produce the results expected. As a successful example, we may mention the setting up in the time from the late 1950s to the early 1970s of a widespread network of fish rearing farms (for sturgeons, bream, roach, pike perch) which also could supply the fry for natural growth in the sea. This program was intended to compensate for major losses

in valuable fish species due mainly to hydroconstruction. Thanks to this program we managed to preserve these fishes not only as indigenous biological species in the region but also as commercial objects. This important nature protection position and the constructive experience should without doubt be also adhered to in the near future to rehabilitate the condition of the water ecosystems including, of course, the sea.

The UN conference in Rio de Janeiro actually coincided with the time of the disintegration of the USSR and the formation of the Common-Wealth of Independent States. The Azov Sea became on account of these changes as international water body and in the course of time some essential disagreements arose between Russia and Ukraine in regard to ecological and fisheries problems of this basin. Even so both sides agreed on a list of urgent measures aimed at preservation of the ecosystem of the Azov Sea as a still highly productive water body and an important source of food and recreational resources, at the maintenance of the biodiversity including the sturgeon stocks. Unfortunately, the pace of implementation of these measures is, particularly, in Ukraine is still quite slow.

It must be emphasized that the breaking up of the USSR led to the collapse of the uniform fisheries complex in the Azov-Black Sea basin. A deplorable fact is that the breeding areas for many species remained within Russian waters, whereas the catching and processing activities take place predominantly in Ukraine. Under these conditions Russia is compelled to actually organize the fisheries branch of the economy in the Basin anew. And when we recall that the period of restructuring falls on the 1990s, i.e. the period of the disastrous economic slump, we can better understand the extent and depth of Russian problems concerning the restoration of a full-scale fisheries complex of this basin.

But what should be done in the nearest future in order to preserve the uniqueness of this basin and the Azov Sea for future generations? In our opinion, the following should be undertaken.

1. In view of the present-day ecological, economic and international situation, we have to formulate a novel conception of the nature protection and fisheries strategy in the Azov Sea basin and a corresponding plan of concrete action.
2. This plan of action must be adopted, financially secured and implemented on the level of the governments of Russia and Ukraine.
3. This conception and plan of action must be based on the principles of sustained development proclaimed by the UN conference.

For the last 50 years dozens of different versions of state programs have been developed in AzNIIRKH the aim of which has been the conservation and rehabilitation of the unique specificities of the present-day ecosystem in the Azov Sea basin. And many of these versions can still be utilized if the partners, Russia and Ukraine, manifest a mutual desire to solve quickly problems of the preservation of the Sea of Azov for future generations.

REFERENCES

BRONFMAN, A.M., DUBININA, V.G., MAKAROVA, G.D., 1979. Hydrological and Hydro-chemical Essentials Ensuring Productivity of the Azov Sea. Moscow, 288 pp. (in Russian)

DANILEVSKI, N.Ya., 1871. Studies into the State of Fisheries in Russia. S. Petersburg, Vol.VIII., 316 pp. (in Russian)

KARPEVICH, A.F., 1973. The efficiency of using the primary production in the trophic chains of the marine basins. Trophology of water animals, Moscow, pp. 226-276. (in Russian)

KARPEVICH, A.F., 1960. The effect of changing river flow and the regime of the Azov Sea on its commercial and feeding fauna: Proceedings of AzNIIRKH. Rostov-on-Don. vol.1, part 1, pp. 3-114. (in Russian)

KARPEVICH, A.F., 1955. Ecological foundation of the prediction of changes in the fish habitats and composition of ichthyofauna in the Azov Sea. Proc.of VNIRO. vol.31, Issue 2., 384 pp. (in Russian)

KORNIENKO, G.G., KOZHIN, A.A., VOLOVIK, S.P., MAKAROV, E.V., 1998. Ecological aspects of the reproductive biology. Rostov-on-Don., 238 pp. (in Russian)

MOISEEV, P.A., 1969. Biological resources of the World Ocean. Moscow, Piscchevaya prom., 88 pp. (in Russian)

VOLOVIK, S.P., 1985. Productivity and problems of management of the Azov Sea ecosystem. Theses for obtaining Ph.D.- Rostov-on-Don, 1985. 563 pp. (in Russian)

VOLOVIK, S.P., 2000. Ctenophore *Mnemiopsis leidyi* (A.Agassiz) in the Azov and Black Seas: its biology and consequences of its intrusion. Ed. S.P. Volovik. Rostov-on-Don. 498 pp. (in Russian)

ZENKEVICH, L.A., 1963. Biology of the seas of the USSR. Moscow, AN SSR, 739 pp. (in Russian)

THE ROLE OF INTERNATIONAL ENVIRONMENTAL INSTITUTIONS IN PROTECTING REGIONAL SEAS: A FOCUS ON THE BLACK SEA

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ABSTRACT

The stark increase of numerous human activities upon and around the Seas within the past couple of decades has significantly increased environmental pollution and degradation. Parallel to the increased level of pollution and degradation to the Seas and its coastal areas, there has been an increase in the level of international awareness and concern. In many parts of the world, this increased level of concern has been pivotal in putting pressure to the governments in order to take appropriate action for the protection of the marine environment. Moreover, it has gradually changed consumption patterns and modes of behavior of the individual. However, the environmental movement does not suffice to take action for the protection of regional seas from pollution. The Black Sea is a good case study for cooperative efforts initiated by coastal countries and strengthened with the support of the international community. Yet, conflict of interests among various organizations and between countries remains to be one of the main challenges to resolve for effective results to be attained. This paper is an assessment regarding how governments responded to the environmental crisis situation in the case of the Black Sea by taking collective. It explores the role of environmental institutions in formulating environmental policy and examines whether coordination and continuity between the institutions was attained. The importance of international arrangements to improve the management of the Black Sea has thus been explored within this context.

INTRODUCTION

Competition and noncooperation remain facts of international relations; yet, among many nations, threats to the survival of various species and exposure to transnational pollutants generally increased receptivity to collaborative action (CALDWELL, 1996). This can be partially explained by the acuteness of the environmental problem in a majority of the global commons. There has been an increased recognition of the importance of informed and careful management of the global commons for their sustainable use, namely through the formulation of international conventions and other forms of institutions (PRICE,1996; VOGLER, 1995). This, as shall be briefly reviewed below, is evidenced by the large number of international environmental institutions formed to protect regional seas within the past two to three decades. The paper shall briefly review some of the international

environmental institutions in regional seas to present the overall picture and then examine the Black Sea region in detail.

The need for regional cooperation has been realized by the formulation of various international environmental institutions in the Black Sea region. For the purpose of this paper, international institutions cover both organizations and rules; hence including international environmental programmes, conventions, declarations and regimes. It is argued that effective environmental institutions can affect the political process by contributing to more appropriate agendas, a process where the problems that require action are identified; by contributing to more comprehensive and specific international policies, agreed upon a political process primarily focusing on intergovernmental bargaining; and, finally by contributing to national policy responses which directly control sources of environmental degradation (HAAS et al.,1994). These are all important steps in assisting countries to take action in issues where there appears to be low priority associated to environmental problems within the overall national agenda, for reasons ranging from low national capabilities to poor public awareness.

THE PROBLEM: REGIONAL SEAS AS INTERNATIONAL COMMONS

The world`s Seas do not respect national boundaries and political boundaries such as defined in the concept of sovereignty. Regional Seas, by definition, are international commons. They are natural resources shared by more than one country. Much of the worlds Seas are common property resources which enables free and unlimited access to the use of the resource. However, the issue of national sovereignty limits the use of international commons within national boundaries. Sovereignty is perceived to function as a kind of dividing line between domestic and international, with territorial boundaries serving as the physical expression of that dividing line in nature (LIFTIN, 1998).

The main concern with the use of common property resources has been defined in a classic essay entitled "The Tragedy of the Common" where individual users of a pasture are described (HARDIN, 1968). The essay argues that man maximizes his own utility when there are no restrictions to the use of the common property whereby the end result of all users maximizing their personal utility brings ruin to the all. This means that overuse and misuse of a resource property will reduce the productivity of the resource and its overall value. In the case of regional seas, several countries share the common resource property. Legally, all inhabitants of countries sharing the common resource are entitled to use the resource domain, the regional Sea. Therefore, unless there is some sort of regulation the sustainable use of regional seas cannot be attained. Regulation in the case of international commons involves a variety of actors and many conflicting interests as opposed to national commons. Thus, the role of coordination and cooperation gains extreme importance.

THE SOLUTION: REGIONAL ENVIRONMENTAL COOPERATION TO REGULATE SHARED RESOURCES

Governments sharing a particular Regional Sea are initially reluctant and even unwilling to devote scarce national resources to alleviate the problem of pollution. Once the damage has been done, which is the case in many of the regional seas subject to this Conference, it is very costly to take preventive measures. However, the increasing cost of the problem to economic sectors relying on the resource and increasing environmental concern, among other factors, eventually results in the willingness of governments to take action.

There are numerous environmental institutions established in order to protect the marine environment. A couple examples shall be provided which are relevant to the Black Sea region, either directly or indirectly. The United Nations Convention on the Law of the Sea entered into force in December 1982 for which the UN Secretary-General acts as depositary. 130 Parties are signatories and 40 have not ratified yet or acceded (Yearbook of International Cooperation on Environment and Development). The Convention has two concepts that are groundbreaking in international law; namely, the concept of the Common Heritage of Mankind as well as the concept of interdependence and interaction of all ocean spaces (BORGESE, 1999). During the negotiations, the Regional Seas Programme of the United Nations Environmental Programme was developed, in 1974. The Programme would primarily address the problems of the marine environment primarily and would attain this goal through a series of regional action plans. There have been at least ten action plans adopted in order to prevent environmental pollution in regional seas, ranging from the Meditteranean Action Plan adopted in 1975 to the Black Sea Action plan adopted in 1996. The action plans had three basic components: first, environmental assessment with an evaluation, review, monitoring and information exchange; second, environmental management including goal setting, planning, international consultation and agreements; third, supporting measures such as education and training, public information, technical cooperation, organization and financing (KECKES, 1992). After the establishment of these institutions, several others have been designed to control marine or river pollution. Although these institutions were established to deal with individual water bodies, they inevitably end up being interlocked in certain regions. It is claimed that organizational interlocking is based on the ecological interdependence among the seas as well as on overlapping memberships (HAAS, 1994). However, the conflict of interests observed in different regional institutions makes it a serious challenge for interlocking in practices. For example, there are various environmental institutions both in the Black Sea and the Danube river. As the Danube river drains directly into the Black Sea, cooperation and coordination is unavoidable if the Black Sea is to be saved from its current state of pollution. On-going efforts for the past decade have not paved way to an official arrangement between the two international programs in the region yet.

International policy coordination occurs in regions where the actors have similar state capabilities to avoid one government to compel others to do what it wants (HAAS, 1994). However, conflict may occur in cases where governments have similar capabilities but different impacts to pollution and degradation problems in the Commons. This is especially a significant matter of concern in the negotiations to solve regional seas problems. For example, the issue of fisheries is a very sensitive one in the Black Sea region and thus an issue where a regional agreement has not found concensus among parties yet. The Convention on Fisheries in the Black Sea is still awaiting signature by some of the riparian countries and thus ratification.

Some successful environmental preservation and pollution control efforts have developed through a Leader-Laggard dynamic such as in the case of the North Sea and Baltic Sea (HAAS, 1994). Leader countries are defined as those with strict sectoral environmental policies who are pressed by industry and public opinion to draw other governments up to their levels of protection and laggards are countries with relatively weak measures and are reluctant to accept stringent measures. The North and Baltic Seas are a good example because some of the strong environmental advocates on a global basis are located in that region, namemly Sweden, Germany and Denmark. They are leaders in the region and promote common measures to be taken for both regions. Leader countries have much more stringent national environmental regulations. Thus, to avoid unfair competition it is to their advantage to increase the environmental regulations in laggard countries. This has been a key factor that ensured the success of the protection of the North and Baltic Seas.

Another factor in the Leader-Laggard dynamic is the role of environmental concern and awareness among the public. As governments are accountable to their own electorate, they would prefer to take action in issues that have national priority. In the Black Sea countries, environmental awareness does not appear to be very strong (BSEP, 1996). Thus, governments do not have an incentive to fulfill environmental obligations, as stated in action plans or in other agreements. Furthermore, environmental non-governmental organizations have a negligable influence in the Black Sea countries and thus in the decision-making process and policy formulation. Although there have been environmental crisis situations such as collapse of the fisheries sector, collision of tankers and coastal erosion in Romania which has raised public response, the outcome was not powerful enough to put pressure on governments.

CASE STUDY OF THE BLACK SEA

The Black Sea is among the most isolated Seas of the world; yet, one it is entirely depleted of oxygen in approximately 90% of its water volume (MEE, 1992). The survival of the flora and fauna of the Sea itself and its coastal areas is confronted with significant threats from anthropogenic factors. It is well documented that the modes of exploitation of the Black Sea environment have not been, and still are not, sustainable (ZAITSEV and MAMAEV, 1997). The crisis situation is evidenced by

the increased level of pollution observed in the Sea and its surroundings, the deteriorating state of natural resources along the coastal zone and the lower productivity of the Sea itself. The harmful development practices in the sectors relying on the Sea and its coasts have actually been self-destructive. Significant industries in the Black Sea are fisheries, agriculture, mining, petrochemicals, coal mines, fertilizer factories, oil refineries, shipping and ports.

Regional Environmental Institutions in the Black Sea

Black Sea countries acknowledged the imminent threat caused by mismanagement of the Sea and took action to establish environmental institutions. Hence, cooperation was initiated within the Black Sea in the late 1980s and has been continuing since. When the drafting process for the Convention started, coastal countries had barely any experiene in formulating common environmental policies.

The main objective of cooperation in the region was simply to find the most optimal solution to prevent or ameliorate pollution and degradation in the Black Sea and its coastal areas. Although there are many alternatives available to protect the Black Sea in theory, in practice a majority involve significant investments and major policy changes. Thus, the establishment of environmental institutions and associated actions require significant sources of funding and vital policy changes. The initial momentum was provided by the international donor community for funding and the willingness of the coastal countries to make the necessary policy changes. Various regional agreements were adopted and a regional programme was established in the early 90s. The Bucharest Convention, the *Convention on the Protection of the Black Sea Against Pollution*, was signed in 1992 and entered into force in early 1994. In 1993, the *Odessa Declaration* was adopted (and a review was made of the Odessa Declaration in 1996). Both of these documents were signed by the six coastal countries, namely Bulgaria, Georgia, Romania, the Russian Federation, Turkey and the Ukraine. In 1993, the Global Environment Facility established a regional programme called the Black Sea Environmental Programme (BSEP) with a Project Implementation Unit. In 1996, with ongoing research efforts of BSEP, a regional *Strategic Action Plan for the Rehabilitation and Protection of the Black Sea* was adopted with signatories from all six coastal countries. In order to implement the objectives set forth in the regional action plan, national action plans were to be prepared. However, the preparation of national Black Sea Action Plans were rather slow and only a couple of them have been finalized. The most recent establishment is that of the Convention`s Secretariat. Without a well-functioning Secretariat, it is impossible to expect the implementation of the regional agreements that have been developed. The Secretariat is expected to facilitate coordinated efforts between the contracting parties to the Convention and the international donor community and to encourage cooperation on a continual basis between coastal countries. It will be a mechanism to promote the implementation of the Convention through a workable agenda and follow-up activities.

The Bucharest Convention was drafted by the six coastal countries with technical advice was provided by international experts. Although coverage is limited to the six coastal countries of the Black Sea, Resolution 2 recognizes the need to cooperation with Danube States to promote the objectives of the Convention. It specifically states that "the rivers tributary to the Black Sea constitute a major source of pollution of the marine environment to the Black Sea". This Resolution suggests the need and desire for organizational interlocking. It expresses willingness of Black Sea States to cooperate with the Danube countries in order to attain effective solutions to the problem.

The Convention aims to reduce or prevent significant sources of pollution to the Black Sea and to enable cooperation in the preservation of marine living resources. It was designed to regulate specific sources of pollution by hazardous substances and matter, from land-based sources, from vessels, by dumping, from activities in the continental shelf, from or through the atmosphere, by hazardous wastes in transboundary movements. The contracting parties also agreed to cooperate in combating pollution in emergency situations as well as in scientific and technical matters. In effect, it commits parties to control specific sources of pollution. Thus, it covers a comprehensive list of pollution sources such as in the Helsinki Convention instead of sources of pollutants as in the North Sea Convention. It also has three Protocols; on protection of the Black Sea marine environment against pollution from land-based sources of pollution, dumping of waste and, in controlling transboundary movement of hazardous wastes.

The backbone of the Odessa Declaration is the set of action plans and associated timetables specified in order to attain the objectives set forth within the framewok of the Bucharest Convention. The main reason the Declaration was drafted in the first place was to assist in the formulation of common goals and environmental priorities, as agenda setting is not a part of Conventions. As a consequence, environmental actions are more vividely stated in the Declaration compared to the Convention. Overall, the primary function of the Ministerial Declaration was to facilitate the development of environmental policy within the Black Sea region and to establish priorities thereof. There are nineteen actions to be adopted involving wide stakeholder involvement within the decision making process. Furthermore, cooperation with international organizations and regional institutions are specifically mentioned.

From a procedural point, it was designed to evidence political commitment at the time adoption to improve the condition of Black Sea environment and to provide the basis for a flexible but continuous process for taking decisions on coordinated national actions towards common goals now and in the future (HEY and MEE, 1993). The Declaration proved to be useful as an initial step to prioritize actions to be taken on a cooperative basis and to facilitate decision-making in further policy instruments given the political support it had attained. It was useful in the preparation of the regional strategic action. However, it was not effective in enabling national action to gain momentum in order to implement the agreed upon actions with specific deadlines. It is merely a soft law and cannot enforce any of its actions.

The most recent policy document, the regional Strategic Action Plan, recognizes that the region is undergoing an economic recovery yet emphasises on the need to take action. Specific actions and commitments regarding the reduction of pollution, improvement of living resource management and sustainable development especially focusing on human development. A detailed analysis in the institutional and financial arrangements is provided to facilitate the implementation of the action plan.

An important fact to point out is that none of the countries bordering the Black Sea had their individual national environmental plans in the early 1990s when BSEP was established. Nevertheless, they each had domestic environmental policies on specific issues regulated through their environmental laws and regulations. The regional action plan was designed as an on-going process of the Bucharest Convention and the Odessa Declaration (BSEP, 1996). It was ideally an initial step in drafting national action plans that would fit within regional objectives, that is facilitate harmony within the region. Although national action plans were drafted, they were never enforced at the national level. The action plans were not included in overall national investment plans, especially in national budget allocations. As a result, national cost-sharing of investments have been low within the general scope of regional environmental investments within the Black Sea.

CONCLUSION AND DISCUSSION

International environmental institutions in the Black Sea were initially successful at attaining political commitment. In particular, it was the Global Environment Facility Black Sea Environmental Programme which served as the first regional initiative promoting cooperation and a coordinated effort among the coastal States. The Programme was a means through which political commitment was facilitated, an essential component to the success of regional programmes. Furthermore, it facilitated the institutional framework for cooperation and for the development of regional policy. Whether this political commitment and cooperation led to the success of the international environmental institutions in the Black Sea is another topic of discussion. It needs to be pointed out that the objective of international environmental agreements is not necessarily to enforce rules but to facilitate policy formulation. Thus, evaluation needs to be made accordingly. Studies need to be conducted to understand whether the state of pollution and degradation has changed since coastal countries committed themselves to protect the Black Sea.

Overall, environmental institutions in the Black Sea were detrimental in policy formulation. Within this process agenda setting was addressed, regional agreements were developed and maintained, coordinated efforts take common action was encouraged. Regarding agenda setting, problem areas were identified on a regional basis, the cause of the problems were explored and hot spots were identified. Agenda setting has been a critical stage of environmental institutions in the region with the recognition that collective policy measures cannot be effectively

taken without it. Within this process, an attempt was made to keep stakeholder involvement high. However, the effectiveness of involving different stakeholders within the agenda setting phase is debatable.

Priority given to the state of the Black Sea was also challenged through this process at the national level. On a technical basis, institutions have been successful in strengthening national technical capacity. On a more political basis, they promoted concern among national governments who do not see environmental concerns in the Black Sea as a priority issue that needs immediate action. In effect, environmental institutions were actually a momentum to domestic efforts. Although documents such as the Convention and the Regional Action Plan led to the general opinion that governments level of concern toward Black Sea issues had increased, current inaction may indicated otherwise. In reality, it is debatable whether the governments of the Black Sea countries have increased priority given to the protection of the Sea and its coastal areas.

Environmental institutions in the Black Sea also provided a network system which enhanced information exchange and increased public awareness. Regional networking was developed both within official insitutions and non-governmental organizations. Media coverage of Black Sea issues were also increased. As a result of these efforts, pollution and degradation issues were kept alive. Scientific reports, books and papers were published with funds provided by the enviornmental programme.. In theory, environmental institutions are known to be magnifiers of public pressure (HAAS, 1994).

The Leader-Laggard dynamic has not been very dominant in the Black Sea region. As a reminder, this dynamic involves leaders and laggards regarding the environment. In regions where this dynamic applies, industry in leader countries is one of the main actors who puts pressure on laggard countries. Currently, all the countries in the region are faced with economic and social turmoil affecting their industry. All of them have state- owned-enterprises along the coast and had much more intense activity up until a decade ago. Today, the industry along the coast is either under-used as a result of the economic difficulties or is inefficiently operated, if at all, due to the old technology. Hence, unfair competition issues due to varying environmental standards have not been a singificant factor in the Black Sea. None of the major industries along the coast have high environmental standards. However, the fact that Turkey is the country causing the lowest pollution load and a country that is heavily impacted by pollution gave it the incentive to push for cooperation to reduce pollution in the Black Sea.

A lack of a leader-laggard dynamic leads to the question of whether there is actually equal concern among Black Sea countries to ameliorate the problem. Varying levels of concern translates into varying levels of commitment of countries sharing the Black Sea. The European Union enlargement issue is a probable reason that countries may have varying levels of concern and thus commitment. Some of the countries of the Black Sea are accession countries and need to gradually adopt European Union directives. There are many other reasons justifying different levels of commitment. An obvious reason is the differences in the economic

circumstances of individual countries. Despite economic difficulties experienced in most of the Black Sea countries, environmental institutions in the region have had a positive impact on the way national governments expressed willingness to act at the international level. In a way, this encouraged increased concern at the national level and indirectly fostered competition among governments.

National governments are key actors in a majority of regional programmes. However, the support of the international community was vital in the case of the Black Sea. The governments could not have sustained the current level of regional cooperation without the funding and technical support especially provided by the the Global Environment Facility and the European Union. The role of the private sector and environmental movement has been negligable within this process.

Funds mobilized by the donor community was instrumental in initiating constructive regional cooperation in the early 90s. This support has continued until today but with gradually increased reluctance by the international community to continue mobilizing funds to pursue the ongoing projects. Without fulfilling financing needs it is practically impossible to successfully meet the objectives specified in the regional agreements. In short, it is essential to ensure that policy changes made this past decade for regional cooperation can be financed in the Black Sea. Insufficient cost sharing has turned out to be one of the most significant problems in combating environmental pollution and degradation, and may even halt the progress of ongoing efforts. One of the most serious obstacles seems to be the lack of ownership of the coastal countries, arising from reasons ranging from economic stagflation in their countries to the low priority given to the environment. Exploring alternative methods and options for revenue generation may be necessary. Policy options to protect the Black Sea needs to be developed in parallel with institutional capacity-building as well as reforms in economic and financial systems. However, without liability for non-compliance it is arguable whether protection of the Black Sea against pollution will be a viable goal in the near future. Unless countries that violate agreements they ratified or signed compensate countries that comply with these agreements, willingness to comply will eventually decrease among all coastal countries. When collective action is to be taken in a particular region, all the countries involved need to be ensured that there are no free-riders; unfortunately, this seems to be at stake in the Black Sea region.

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REFERENCES

CALDWELL, L.K., 1996. *International Environmental Policy*, 3rd edition, Duke University Press, Durham.

GEF Black Sea Environmental Programme., 1997. *Annual Report*, BSEP, Istanbul.

GEF Black Sea Environmental Programme, 1996a. *Annual Report*, Black Sea Environmental Programme, Istanbul.

GEF Black Sea Environmental Programme., 1996b. *Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*, Black Sea Environmental Programme, Istanbul.

HAAS, P., KEOHANE, R.O., and LEVY, M.A., 1994. The Effectiveness of International Environmental Institutions, in *Institutions for the Earth*, P. Haas, R.O. Keohane and M. A. Levy (eds), The MIT Press.

HAAS, P.M., 1994. Protecting the Baltic and North Seas in *Institutions for the Earth*, P. Haas, R.O. Keohane and M. A. Levy (eds), The MIT Press.

HARDIN, G., 1968. The Tragedy of the Commons, *Science*, Vol 162, 13.

HEY, E., MEE, D. L., 1993. The Ministerial Declaration: An Important Step, *Environmental Policy and Law*, 23/5.

KECEKS, S., 1992. The Protection and Development of the Marine Environment: UNEP`s Oceans and Coastal Areas Programmes in *Ocean Management in Global Change*, P. Fabbri (ed), Elsevier Applied Sciences, London.

LIFTIN, K., 1998. *The Greening of Sovereignty in World Politics*, The MIT Press, Cambridge.

MEE, D. Laurence, 1992. The Black Sea in Crisis: A Need for Concerted International Action, *Ambio*, Vol 21, No. 4.

PRICE, M.F., 1996. The Reality of Implementing an International Convention, *Global Environmental Change*, Vol. 6 No.3, pp. 193-203.

VOGLER, J., 1995. *The Global Commons: A Regime Analysis*, Wiley, Chichester.

Yearbook of International Co-operation on Environment and Development 1999/2000 (eighth volume), Earthscan Publications.

ZAITSEV, P. Yu, MAMAEV, V., 1997. *Biological Diversity in the Black Sea*. United Nations Development Programme, New York.

THE DANUBE ROLE IN THE BLACK SEA CONTAMINATION

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ABSTRACT

The key note of the article is the Danube water quality and its influence over the Black Sea ecosystem. The description of present state of river and marine ecosystem, the main processes: the Danube delta role and anthropogenic eutrophication are included.

INTRODUCTION

The Danube is the main river of the Black Sea basin, and it influences the latter's productivity and biodiversity of the Black Sea. The annual average of the river run off is 203 – 210 km^3. It is 36% of the fresh water coming into the Black Sea and 77,4% of the fresh water coming into the Northwestern part of the Black Sea. Total length of the river is 2860 km, drainage basin 817000 km^2, it is approximately 41% of the drainage basin of the whole sea. There are 17 industrial countries with agricultural structure. The mouth of the Danube River occupies the area 7000 km^2 and includes delta's background 85 km long and its area is 5640 km^2 and avandelta 220 km long and its area is 1360 km^2 (HYDROBILOGIA, 1963).

The Danube delta is a typical ecoton with maximum biological diversity and production of the land flora and fauna and also the bottom hydrobions in avandelta (KHARCHENKO and LIASHENKO, 1996, BIODIVERSITY, 1999). In comparison with other wetlands, the Danube delta, as a transition zone for the existence of aquatic, terrestrial, freshwater and marine communities, is a kind of «center for life condensing» in the Black Sea basin (ALEXANDROV, 1998a). The scientists evaluated 3569 species of plants and animals (GOMOIU, 1996) in Romanian part of delta and 4318 species – in Ukrainian part (BIODIVERSITY, 1999). In 1991 Danube Delta Biosphere Reserve (GOMOIU, 1996) was founded in Romania (the area 591200 hectare). The same kind of reserve was founded in 1998 on the total area 46 403 hectare. According to the decision of the International Co-ordinating Council of the UNESCO Programme on Man and Biosphere of 2 February 1999, it was designated for inclusion in the Word Network of Biosphere reserve. This same decision was made with the bilateral Romanian-Ukrainian biosphere reserve "Danube-Delta" (BIODIVERSITY, 1999).

MATERIALS and METHODS

The materials collected during the period of 1977-1997 (36 marine expeditions). The following parameters were determined: the velocity and direction of the wind and marine currents, water temperature, transparency, salinity, suspended matter, oxygen and BOD_5, pH, mineral and organic forms of nitrogen and phosphorus, silicon, oil, heavy metals (Cu, Ni, Cd, Zi), biomass and density of phyto- and zooplankton, macrozoobenthos. The investigation was done according to standard methods. In Kilia delta and sea coastal zone the materials were collected during the period of 1987-2000 (40 expeditions).

RESULTS and DISCUSSION

The area of the Danube influence over the Sea stretches from seashore to pelagic ecotone – the zone of interjection of river and marine water masses (12 – 17 ‰ salinity). The total area of the direct influence of the Danube is not less than 10^5 km by fresh water phytoplankton distribution (ZAITSEV, 1989). The initial borders of ecotone zone (final zone of Danube transformation) have seasonal changes in a distance from the shore. In spring this distance is minimal: about 25 km along the 45^0 longitude, in summer - about 45 km (ALEXANDROV, 1998b).

For the last decade the Danube's hydrological regime underwent serious changes. It is connected with the building of hydropower stations and water pools: Gerdap 1, Gerdap 2 (Bulgaria) and Gapchikovo – Nadiamarosh (Hungary). Water pools worked as buffers, current velocity lessened and resulted in falling down of suspended matter. The transparency of water increases so photosynthesis and phytoplankton (diatomaceous) begin to develop. For example, the sediment discharge of the River Danube has decreased by 0-40 % with the construction of the Iron Gates dams (PANIN et al., 1996). In the 1960 – 80s in Kylia delta monthly average of suspended matter was 160 g/m^3 (within limits 93 – 242 g/m^3) and in 1995 – 97 the average of suspended matter was 93g/m^3 (within limits 15 - 215 g/m^3). But during spring tide the concentrations of suspended matter are very high, for example in May 2000 it reached the level 528 g/m^3. The present day average sediment discharge of the River Danube is estimated at 40-50 million tons per year, out of which 5-8 million tons/year sandy material (PANIN et al., 1996).

The Danube is the main supplier of nutrients into the Black Sea and the main source of eutrophication. The Danube waters carry 60-90% of total amount of nutrients to the northwestern part of the Black Sea (GARKAVAYA et al., 1997). Maximum of nutrients was recorded in the 1970-1980s (Table 1).

Further mineral forms of nitrogen and phosphorus decrease and organic forms increase. It is connected with water blooming in water pools and anthropogenic power increases. Oil, heavy metals, phenols are the course of pollution. The character of distribution depends on hydrological regime and anthropogenic power (industry, ports activity, shipping ways, etc.). Average data of oil in the Kilia delta is 0,065 – 0,075 mg/l. Maximum oil (up to 0,48 mg/l) is in the

arms: Prorva, Staro-Stambulsky and Vostochny. Oil concentration in the bottom sediments is within limits 0,1 – 5,2 mg/g of dry soil. In summer time it could provoke mortality of bottom organisms.

Concentration of heavy metals (suspended and dissolved forms) is shown in Table 2. In delta itself the concentration of pollution much more than in the river, so delta accumulates the contamination.

Accident in Romania (January – March, 2000) provided fluxes of pollution to the Danube (cyanide, heavy metals). In Kilia delta the following concentrations of contaminants had been marked: cyanide – 0,044 - 0,116 mg/l, oil – 0,075 mg/l, heavy metal (dissolved forms) Cu – 0,006 mg/l, Zn – 0,019 mg/l. The influence of the accident to the marine ecosystem had not been marked.

In the Danube delta wetland the most important processes take place due to the life activities of hydrobiontes, i.e. utilization and mineralization of organic matter; and pollutants are included into trophic cycles. Bacterias are the most important. Based on the average river run off, destruction velocity of organic matter caused by bacteria, unicellular plants and zooplankton, annual volume of utilized organic matter is 1,5 billion ton, i.e. the share of bacteria is 68%, zooplankton – 20%, phytoplankton – 12%, with minimum of benthos. One of the most important components is high water plants. Reeds *Phragmites australis* provide 93 – 99% of water clearance. Roots are the main source of accumulation. So delta works as biofilter, clearance for nitrate is 38,7 kg/min; phosphates – 49,6 kg/min. The Danube delta flora extracts 59,1 tons nitrate, 20,5 tons phosphates, 23,3 tons heavy metals and 0,1tons pesticides. Cleaning effect of the Danube wetland is much more effective than that of the Dniepr and Dniestr.

The Danube fresh water influence over northwestern part of the Black Sea is very strong. This influence is marked in the Romanian and Bulganian shelf, and sometimes it spreads up to the Bosporus. Supposed border of the fresh water area in the sea is 17‰. The size of this area depends on the river run off (season flood), the maximum in May and the minimum in October – November. In full water year, the area of the Danube influence occupies 70% of northwestern part of the Black Sea. In poor water year, this area decreases up to 20 – 30%. The vertical structure of the water masses is charaterised by strong gradient of salinity (all year round) and temperature (seasonaly – April - November). The difference in between salinity upper and lower layers makes up about 5 – 10 ‰. Near the delta mouth (avandelta area is not more than 3 – 5 miles long from the shore line) salinity on the surface is 3 – 10 ‰ , in the bottom layer salinity is real marine – 14 - 18‰ (Fig.1). In avandelta (within limits 2 – 6 ‰ of salinity) there is falling of organic and inorganic compounds and their transformation into the bottom sediments (Table 3).

It was established at the coastal zone of the Danube the loss of the substance occurs in spring time – about 75% of ammonia nitrogen and about 40 – 50% of nitrites, phosphates, nitrates and silicon. The last decade the concentration of nutrients was within limits: phosphates 0,010 – 0,300 mg/l, ammonia nitrogen 0 – 0,270 mg/l, nitrates 0,004 – 1,440 mg/l, silicon 0,340 – 7,000 mg/l, organic nitrogen 0,020 - 2,700 mg/l. In the blooming zone the concentration of organic nitrogen was

5,000 mg/l. Eutrophic waters of the Danube increase the mineral and organic matter in the sea (table 4).

Maximum of eutrophication in the northwestern part of the Black Sea was observed in 1970 – 80. Development of the phytoplankton provided photosynthesis and dissolved oxygen increased up to 150 – 200% and pH 8,6 – 9,3. In condition of density and temperature stratification of water masses in summer time, decay of dead phytoplankton leads to oxygen lack – near bottom hypoxia. Hypoxia is the consequence of anthropogenic eutrophication of the sea and leads to mass mortality of the bottom organisms. In 1973 – 90 in northwestern part of the Black Sea, the zone of hypoxia occupied 3500 – 40000 km² (ZAITSEV, 1992). In these years, because of lack of oxygen, 60 billion tons of bottom animals and 5 billion tons of fish perished, especially young ones. In recent years, in spite of decreasing of nutrients coming from the Danube, the hypoxia area is almost the same. During the period of reconstruction on the border – water – bottom sediments we observed fluxes of ammonia nitrogen, phosphates and silicon from the bottom sediments. This is additional sourse of eutrophication for marine waters. This fluxes is compared with the nutrients coming from the Danube. During the last decade the concentration of organic nitrogen increased in the sea as well as in the Danube (Fig. 2).

The total volume of the plankton flow, besides nutrients, determines the efficiency of the mouth of the delta, the scale of influence on the Black Sea. The average annual volume of this flow at the top of the delta is about 1,340,000 tons, of which bacteria make up 80.8 %, phytoplankton 11.1 % and zooplankton 8.1% (KHARCHENKO et al., 1993).

The zone of direct influence of Danube waters on the Black Sea is selected on the boundary of detection of freshwater algae which continue to grow in marine water. Depending on the estimate of the river runoff, the area of the zone varies and the maximum size of the surface of the pelagic zone reaches 100,000 sq. km.

The increasing of diversity, density and biomass of hydrobionts in the zone of transformation in comparison with adjacent areas can be considered as a manifestation of «edge effect» on the boundary of coexistence of brackishwater and marine fauna. Usually in this zone total biomass and production of hydrobionts are 2-5 times higher (ZAMRIBORSH et al., 1960).

Regular blooming of the sea in a surface layer up to a depth of 10 m has been noted. The total phytoplankton biomass is more than 400,000 tons in an area about 40,000 sq. km in the summer time (ZAITSEV et al., 1989).

Among the animal population of the ecotone «river-sea» - there is an absolute prevalence of noctiluca, *Noctiluca scintillans*, making up to 90 % of the density and biomass of pelagic organisms. In 1988 to the south from Sfintu Gheorghe branch on an area about 3,400 sq. km super high biomass of this organism (125-560 $kg.m^{-3}$) was registered (ZAITSEV and MAMAEV, 1997).

The comparison of quantitative measurements of distribution of hydrobionts from the Danube river-bed up to the sea allows to state the following conformity to natural laws:

* on the average, the biomass of hydrobionts is 5-10 times higher in the sea than in the river (phytoplankton - 4.8 times, mesozooplankton - 14.3 times, macrozoobenthos - 8.1 times);
* in delta water bodies, lower numbers and biomass of hydrobionts have been observed in comparison with adjacent zones - river branches and sea-coast (Table 5).

The intensive sedimentation (or silting) and reduction of current in the river delta are the main reasons for this type of distribution of aquatic organisms.

The existence of many species of fish in a coastal complex, and also migrations, for example, of herring and sturgeon from the sea into the river, is illustrated by the existence of a high productive «river-sea» ecotone in the zone of the river mouth of the delta.

The fish fauna of the delta is remarkably rich, with 91 species belonging to 30 families. The majority of these (44) are freshwater species, the other being migratory species that occur in the Black Sea and mainly come to the delta during the breeding season (SUKHOVYVAN and MOGILCHENKO, 1986).

In the last decade, ichtyocenoces of the Danube and Black Sea coastal zone changed because of anthropogenic eutrophication. Increasing of fisheries using ocean vessels in 1970 – 80 changed to decreasing of fisheries in 1990 because of economical crisis in communist's countries. Feeding zooplankton decreased because of new invader - *Mnemiopsis leidyi.* It led to great losses and decreasing of fishes (anchovy). At present total catch is – 13000 tons per year – at the level of 1950 (AVERKIEV, 1960). In general fishes are caught by drag-net instead of nets and sweep-nets. The valuable fishes (scomber, bonito, blue fish, scad, striped mullet, Black Sea mullets) disappeared in 1960-70. Catch decreased greatly for Black Sea turbot and flounder. Cheap sorts of fishes (sprat – 86,5%, anchovy – 8,5%, mackerel – 2,8%) are prevailing (Table 6).

It is necessary to mark that shipping on the Danube River reduced. Balkan wars cansed the economical crisis and great losses in Bulgaria, Romania and Ukraine. For example, in Ukraine financial limits didn't allow to keep Danube shipping way in working order (the Danube and marine canals are innavigable). Just now there is a state project for building a new shipping way through arm Bystry. The perspectives of renewing such ports as Kilia, Ismail and the construction of new one in Vilkovo.

CONCLUSIONS

In the framework of the European River Ocean System Projects (EROS-2000 and EROS-21) the Black Sea countries together with EC special complex investigations on the river Danube-Black Sea system had been made. It proves the importance of the Danube in solving the ecological and economical problems. The Danube accumulates industrial waste from Central and Eastern Europe. Black Sea ecosystem

is very sensitive to the quality of the Danube water that is why the Danube needs the international control over the water quality.

The most important problem of near bottom hypoxia and bottom organisms mortality still exist in spite of decreasing nutrients coming from the Danube. The main cause is accumulation and fluxes nutrients from the marine bottom sediments.

REFERENCES

ALEXANDROV, B. 1998. The Danube influence to the mezozooplankton formation in the Black Sea. In B. Ecosystema vzmoria ukrainskoi delti Dunaia. Odessa. Astroprint. 245 – 261 (In Russian)

ALEXANDROV, B., 1998 a. The function of wetlands.- In: The Black Sea in Crisis.- World Scientific Publishing Co.Pte.Ltd..- Singapore, New Jersey, London, Hong Kong, 1998a. 84-89.

ALEXANDROV, B., 1998b. The influence of the Danube on the Black Sea mesozooplankton // Estuarine, Coastal and Shelf Science- - 17. (in press).

ALEXANDROV, B., ZAITSEV, YU., 1998. The Danube region of the Balck Sea biodiversity in eutrophication conditions. In B. Ecosystema vzmoria ukrainskoi delti Dunaia. Odessa. Astroprint. 304 – 322. (In Russian)

ALEXANDROV, B.,2000. Changes in productivity of the Black Sea and some practical recommendations for it's protection / Materials of Intern. Sympos. "The Black Sea ecological problems" (31 October-5 November, Odessa, Ukraine).- OCNTI, 8-13.

AVERKIEV, F., 1960. Statistical Collection of fishes in Azov and Black Sea. Trudi AzNIRH. V. 1 2-93. (In Russian)

Biodiversiti of the Dunaisky Biosphere Reserve, protection and management / Ed. By Yu.R. Sheliag-Sosonko.- K.: Naukova dumka Publ., 1999.- 703 pp. (in Ukrainian).

GIDRLOGIA USTJVOQ OBLASTI DUNAIA, 1963. Moscow, Gidrometeoizdat., 383. (In Russian)

GOMOIU, M.-T. 1996. Facts and remarks on the Danube Delta / In: Danube Delta – Black Sea system under global changes impact / ed. by M.Malita, M.-T.Gomoiu, N.Panin.- GEO-ECO-MARINA, RCGGM, 1. 99-113.

KHARCHENCO, T., LIASHENKO, A., 1996. Structural and functional macrozoobenthos characteristics of aquatic ecotones as indices of their borders, Hydrobiol. Zhurnal 32(2), 3-11 (in Russian).

KHARCHENKO, T., TIMCHENKO, V., KOVALCHUK, A. et al. 1993. Hydroecology of Ukrainian part of the Danube and adjacent areas.- Kiev: Nauk. dumka Publ. 328. (in Russian).

MIRINOV, O., MILOVIDOVA, N, and KIRUKHINA, L. 1986. The limits of oil concentration in bottom sediments of the coastal zone of the Black Sea. Gidrobiologichesky zhurnal. V. 22., 76-79. (In Russian)

PANIN., N. , GOMOIU M.-T., OAIE., Gh., RADAN., S. 1996. Researches on the river Danube – Black Sea system carried out by the Romanian Center of Marine

Geology and Geo-Ecology during 1995 in the framework of the European river ocean system project (EROS-2000) / ed. by M.Malita, M.-T.Gomoiu, N.Panin.- GEO-ECO-MARINA, RCGGM, 1. 127-154.
PORUMB, F. 1994. Le zooplancton des eaux roumaines de la mer Noire // Cercertări marine I.R.C.M., 27-28.- 159-252.
SUKHOYVAN., P. and MOGILCHENKO, V. 1986 Ichthyofauna and main commercial fishes biology of the Kilia Danube Delta and Sasik reservoir / In: Gydrobiologia Dunaya y limanov Severo-Zapadnogo Prichernomorya Kiev: Nauk. dumka Publ. 105-119 (in Russian).
ȚIGÄNUȘ., V. and DUMITRACHE., C. 1991-92 Structure actuelle du zoobenthos de la zone de faible profondeur devant les embouchures du Danube // Cercetări marine I.R.C.M., 24-25. 125-132.
VOROBJEVA, L., GARKAVAYA, G. and NESTEROVA, D. et al. 1995. Zhebrijansky Bay as a model of ecological processes in impact zones of the north-western part of the Black Sea / V.N.Eremeev et al. (eds.), In: Investigations of the Shelf Zone of the Azov-Black Sea Basin, Sevastopol: MHI NAS of the Ukraine Publ., . 44-54 (in Russian).
ZAITSEV., Yu., GARKAVAYA, G., NESTEROVA., D., POLISCHUK., L. 1989. Danube is a main source of the Black Sea eutrofication, Hydrobiol. Zhurnal 25(4), 21-23 (in Russian).
ZAITSEV., YU. 1990. Ecological state of the Black Sea shelf zone, Ukrainian coast (a review), Gidrobiologichesky zhurnal, 28 (4), 3 – 18.(in Russian)

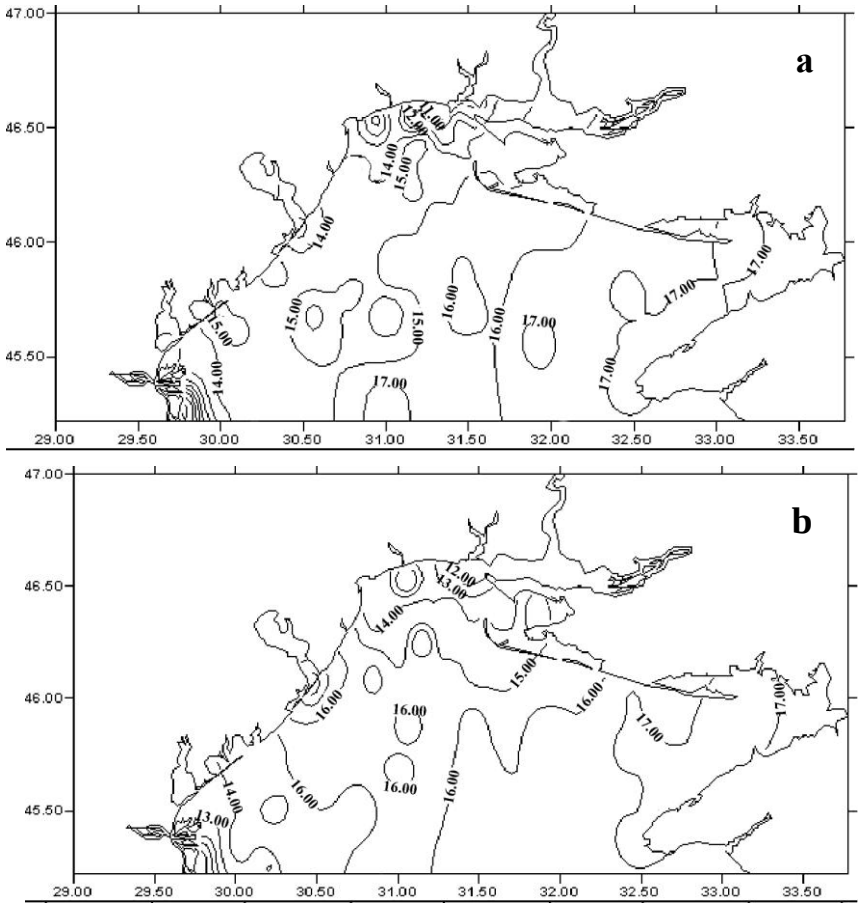

Fig. 1. Salinity distribution on the surface in the Northwestern part of the Black Sea in a period 1977-84 (a) and 1989-93 (b).

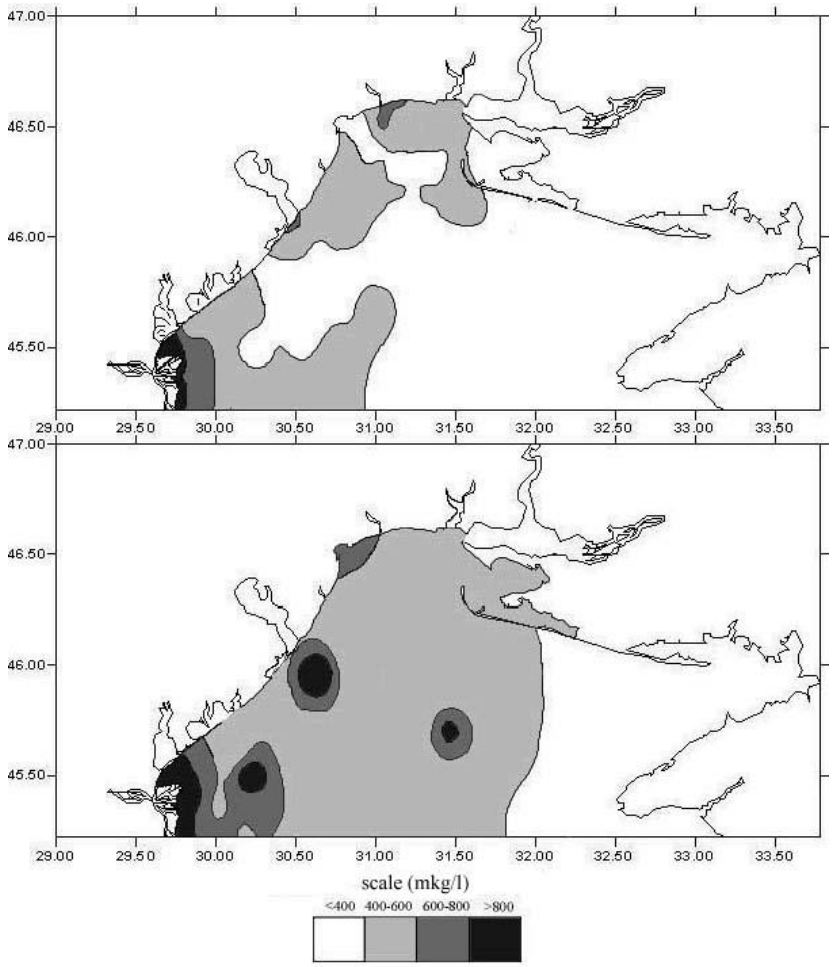

Fig. 2. Nitrogen organic on the surface in a period 1977 – 1984 (a) and 1989 – 1993 (b) in northwestern part of the Black Sea.

Table 1. Long-term dynamic of nitrogen and phosphorus into the water of Kilia delta.

Period	River run off km^3/year	NH_4	NO_2	NO_3	$N_{mineral.}$	$N_{organic}$	N_{total}	PO_4	$P_{organic}$	P_{total}
		Mg/l								
1958-1960	179,4	0,25	0,012	0,53	0,79	0,63	1,42	0,071	0,031	0,102
1977-1985	227,7	0,62	0,044	1,00	1,66	0,90	2,56	0,165	0,071	0,238
1986-1988	204,7	0,57	0,160	1,26	1,86	3,07	4,93	0,281	0,100	0,380
1989-1992	169,7	0,44	0,118	1,63	2,19	5,07	7,25	0,233	0,113	0,336
1993-1996	195,1	0,13	0,074	1,18	1,38	3,74	5,12	0,091	0,096	0,187
1997-1998	222,8	0,05	0,016	0,56	0,63	6,97	7,60	0,078	0,048	0,126

Table 2. Oil and heavy metals into the Kilia delta (1993 - 97).

Within limits	Oil mg/ l	Cu	Zn	Ni	Cd	Cu	Zn	Ni	Cd
		Dissolved forms (mg/l)				Saspended forms (mg/l)			
Surface layer									
Min	0,01	0	0	0	0	0	0,004	0	0
Max	0,048	0,005	0,067	0,003	0,001	0,016	0,060	0,013	0,002
Average	0,09	0,003	0,011	0,001	0	0,005	0,021	0,004	0,001
Bottom layer									
Min	0,01	0	0	0,54	0	0,001	0,008	0,001	0
Max	0,25	0,007	0,058	0,014	0,001	0,026	0,070	0,016	0,002
Average	0,07	0,003	0,015	0,003	0,003	0,008	0,027	0,005	0,001

Table 3.The dynamics of hydrochemistry parameters in the Danube avandelta (zone of fresh and marine waters mixing).

Period	NH_4	NO_2	NO_3	$N_{organic.}$	PO_4	$P_{organic.}$
	mg/l					
18 km of the Danube (from the Sea)	0,40	0,083	1,35	3,53	0,20	0,09
Delta mouth	0,54	0,072	0,73	4,29	0,22	0,07
1 ‰	0,35	0,055	1,47	5,85	0,09	0,09
1-2 ‰	0,27	0,070	1,20	5,79	0,11	0,11
2-3‰	0,28	0,041	1,17	1,90	0,21	0,21
3-4 ‰	0,03	0,040	1,61	2,52	0,27	0,27
4-5 ‰	0,04	0,034	0,91	2,19	0,07	0,07

Table 4. Concentrations of nutrients in the zone of the Danube influence.

Period	NH_4	NO_2	NO_3	$N_{ogranic.}$	PO_4	$P_{organic.}$
	mg/l					
1948-1960	0,025	0,003	0,010	0,230	0,014	0,016
1977-1987	0,445	0,005	0,042	0,441	0,029	0,025
1987-1997	0,081	0,006	0,056	0,706	0,025	0,022

Table 5. Average biomass of hydrobionts in different zones of the Danube influence (1986-1990)

HYDROBIONTS	Z O N E S			Reference
	River-bed	Delta	Coastal waters	
Phytoplankton, $g.m^{-3}$	7.23* (15.1)*	5.13* (51.2)*	39.87 ($0.8 \cdot 10^3$)	21, 23
Zooplankton, $g.m^{-3}$	0.33 (1.4)	0.33 (1.3)	1.78 ($0.5 \cdot 10^3$)	6, 13, 23
Zoobenthos, $g.m^{-2}$	205.60 (804.9)	40.50 (36.7)	143.14 ($3.3 \cdot 10^3$)	6, 21, 23

Note. Sources of information: to all of hydrobionts (KHARCHENKO et al., 1993; VOROBJOVA et al., 1995) and additional for phytoplankton (IVANOV., personal communication), zooplankton (PORUNB, 1994-1995), zoobenthos (ŢIGANUS and DUMITRACHE, 1991-1992). Maximal biomass in brackets.

Table 6. Changing in species composition and quantity characteristics of the ichthyofauna in the Danube river mouth zone of the Black Sea and some economic evaluations*.

Species	Before eutrophication (1956 – 1959)			After eutrophication (1995 – 1997)		
	Average annual catch, tons	Share of catch, %	Total price, Millions USD	Average annual catch, tons	Share of catch, %	Total price, Millions USD
Plankton feeding fish						
Sprat	1398,4	42,31	0,559	3933,0	83,15	7,866
Anchovy	826,1	25,00	0,496	249,0	5,26	0,747
Danube shad	13,1	0,40	0,010	163,3	3,45	0,653
Black Sea scad	498,5	15,08	0,399	30,7	0,65	0,123
Bonito	189,8	5,74	0,380	0,0	0,00	0,000
Mackerel	94,3	2,85	0,151	0,0	0,00	0,000
Total	**3020,2**	**91,38**	**1,995**	1,995	**92,51**	**9,389**
Bottom feeding fish						
Great sturgeon	38,3	1,16	0,230	0,0	0,00	0,000
Russian sturgeon	5,8	0,18	0,029	0,7	0,01	0,018
Starred sturgeon	3,1	0,09	0,011	0,0	0,00	0,000
Grey mullet	2,5	0,07	0,002	0,3	0,01	0,002
Turbot	152,0	4,60	0,274	0,0	0,00	0,000
Flounder	2,2	0,07	0,004	23,7	0,50	0,213
Others	81,0	2,45	0,002	329,5	6,96	0,033
Total	**3305,0**	**100,00**	**0,551**	0,551	**100,00**	**9,654**

Note. Sources of information: Data from Ukrainian part of the Black Sea (ALEXANDROV, 2000).

REGIONAL TRANSPORT DEMANDS AND THE SAFETY OF NAVIGATION IN THE TURKISH STRAITS: A BALANCE AT RISK

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ABSTRACT

From myths to modern times, the Turkish Straits have been a strategically important waterway for maritime transportation, for both commercial and military purposes. Due to this importance, throughout history as well as today the region has served as a playground for regional actors and global powers. The Turkish Straits witnessed two major tanker accidents resulting in 125.000 tons of oil spilling into the sea in the last decade[1]. Nevertheless, Istanbul was lucky in these accidents because they took place at the entrances of the Strait, otherwise they could have been much worse. The vast oil potential of the land-locked Caspian Sea region rely on the Straits, for their transportation needs. Yet the already congested Straits increasingly becoming inconvenient to navigation may not be able to support the additional oil transportation demands. Is a compromise possible?

Turkish Straits: from myths to modern times…

According to mythology, the legendary hero Jason led his Argonauts[2] through the Bosporus to reach Colchis[3], in search of the "Golden Fleece". Jason, Captain of the Argonauts, vowed to avenge his father, the rightful king of Iolcus, who had been deposed by his step-uncle, Pelias. Pelias said Jason could have the throne of Iolcus if he brought back the Golden Fleece from Colchis. Jason had the Argo built, chose 53 crewmembers and set out. In this legendary journey from Thessaly to Colchis, he passed through the Bosporus. The current was so strong and the swell so great that Jason and his ship Argo could only pass with the help of Poseidon, the god of the sea.

History and romance mix with geography and politics along the Turkish Straits. For centuries, the Strait of Istanbul has been a strategically vital waterway to and from the Black Sea. In 513 B.C. the Persian emperor Darius built a bridge of ships crossing it to lead his army to Greece. Throughout history many forts and palaces were built on the coasts of the Straits, as testimony of the strategic value of these

[1] In 1978 the Romanian flagged *Independenta* collided with the Greek flagged *Evrialı* spilling 95,000 tones of oil into the Strait of Istanbul. IN 1994 the *Nassia* collided with the *Shipbroker* and spilled 30,000 tons of oil into the Strait of Istanbul.

[2] The boat of Jason was called the"Argus", taking the name of her builder; its warriors/sailors were called the "Argonauts".

[3] Today's Georgia.

most difficult waterways. In 1453, the Ottomans conquered Istanbul dramatically changing the role and significance of the Straits as a commercial passageway connecting east and west. Ottoman control over the Straits lasted for centuries[4]. In 1833, the Treaty of Hunkar Iskelesi was signed between the Ottomans and Russia, which granted free passage to Russian warships through the Straits "in case of need." The Treaty of London (1840) and the Straits Convention (1841) followed. These were the first international instruments to regulate passage through the Straits. The Ottomans, however, lost control over the Straits with the 1918 Mondros Armistice. According to this armistice, Turkish Forces were to be demobilized immediately and Allied forces were to occupy strategic points along the Turkish Straits. The treaty of Sevres, signed in 1920, entrusted the responsibility of administering the rules of passage through the Straits to an International Straits Commission[5]. But, the success of the Turkish national movement under the leadership of Mustafa Kemal prevented the ratification of the Sevres Treaty.

The Lausanne Convention was concluded after the success of the Turkish Independence War under the command of Mustafa Kemal (Ataturk). The most significant aspect of the Lausanne Convention was the demilitarisation provisions. In 1936, with growing concerns over world peace Turkey was able to successfully replace the Lausanne Convention created regime for the Turkish Straits with the Montreux Convention. Montreux recognized the principle of free passage and navigation through the Straits and allowed Turkey to remilitarise them. Montreux, which is made of 29 Articles, four Annexes and one protocol, provides for a detailed passage regime.[6]

Characteristics of the Turkish Straits

Comprised of the Istanbul and Çanakkale Straits and the Sea of Marmara, the Turkish Straits form a waterway of strategic and economic importance. As the only water route between the Black Sea and the Mediterranean, the Turkish Straits both geographically and metaphorically connect Europe to Asia. The total navigational distance from one end to other is 300 km; and takes about 18 hours for a vessel traveling at average speed. There are 265 Straits in the world;[7] however, the Turkish Straits are the most unique amongst them due to their physical, hydrological and oceanographic characteristics, as well as the complicated navigational conditions.
The Strait of Istanbul is the most critical component of the Turkish Straits system and it presents the greatest challenge for navigation snaking through the heart of

[4] DELUCA, Anthony R., *Great Power Rivalry at the Turkish Straits*, Columbia University Press, 1981,1
[5] SHOTWELL, James A. and DEAK, F., *Turkey at the Straits*, New York, 1940, p.108
[6] For a detailed analysis of the Convention see, DELUCA, Anthony R., *Great Power Rivalry…supra*.
[7] http://www@mfa.gov.tr/grupa/ad/adb/navigate.htm

Istanbul, a city of over 10 million people, a city rich with thousands of years of history and which was declared a "World Heritage City" by UNESCO. Some of the unique characteristics of the Strait of Istanbul are as follows:

1. It has a winding and quite narrow geographical structure.
2. It is 18 nautical miles (31 Km.) in length.
3. Among the straits of the world, it is the narrowest, constricting to a mere 698 meters between Kandilli and Bebek, leaving only a vessel's length of free way on either side in an area densely populated.
4. It has numerous bends requiring 12 course alterations for; some of these alterations are very sharp, more than 80 degrees.
5. At the bends (Kandilli and Yeniköy) where major course alterations must be made, rear and forward visibility is totally obstructed prior to and during manoeuvring.

The Strait of Istanbul is not very convenient for maritime traffic due to the morphological characteristics mentioned above. However, the greatest danger to navigation is posed by surface and subsurface currents, eddies and counter currents. Oceanographic and meteorological conditions that make navigation more difficult in the Strait of Istanbul are as follows:

1. Currents-Counter Currents: The main cause of sub-surface currents is the difference of density between the Black Sea and the Aegean Sea, while the main cause of surface currents is the difference of water levels between these two seas. The usual current activity in the Strait of Istanbul is from North to South. Speed varies from 4 knots to 6-7 knots depending on weather conditions. Strong south winds cause a reversal in the direction of the current in the Strait which in turn causes eddies making the waters very difficult-to navigate. These currents are locally known as the 'orkoz' currents.
2. Cross- currents at the bends: Crosscurrents literally push the fore and aft of the vessel and making it very difficult for her to turn in the desired direction.
3. Rain and fog: The Strait of Istanbul is suspended to maritime traffic when the visibility is restricted less than one mile. Navigation in the fog can not be an option in the Straits even after the advanced VTS system is built.

Regional importance of safety in the Turkish Straits

The Straits have significant regional importance as the only maritime route to and from the Black Sea markets of Bulgaria, Georgia, Romania, Russia and then to the Caspian Sea and the central Asian markets of Armenia, Azerbaijan, Kazakhstan, Turkmenistan and Uzbekistan.[8] Until 1991, there were only four independent states bordering the Black Sea: Turkey, Bulgaria, Romania, and the USSR. After the

[8] Dyeulgerov, M., *Navigating the Bosporus and the Dardanelles: A test for the International Community*, The International Journal of Marine and Coastal Law, Vol.14, p.64.

collapse of the USSR in December 1991, four new states emerged: Moldavia, Ukraine, Russia and Georgia. The "flag state" data of these states in the Turkish Straits for the year 2000 are as follows:

Table 1. Flag States of vessels that used the Turkish Straits.

Flag State	Total passages	Bigger than 200 m.	Greater than 500 GT	Percentage in total %
Turkey	15311	51	12503	26
Russia	5419	39	5357	11
Ukraine	5195	8	5036	11
Bulgaria	920	21	913	2
Romania	476	4	454	1
Total	27322	123	24263	57

As seen in the above statistics, 57 percent of the total passages were by Black Sea coastal State vessels. Amongst these states only Russia has alternative ports to the Black Sea within her territory; the rest (excluding Turkey) are dependent on the Straits for their seaborne transportation out of the Black Sea. In other words, Bulgaria, Romania, Moldavia, Ukraine, and Georgia, have no alternatives for their maritime transportation other than using the Straits. Even Russia can be seen as Straits-dependent for maritime transportation as the Baltic ports actually can be not be viewed as viable alternatives to the Black-Sea ports of the same State.

From that point of view, it is a clear fact that the Turkish Straits function as a vital connection point for locked Black-Sea countries: therefore keeping the Straits safe and open to maritime traffic has a crucial importance for the region.

Table 2. Traffic statistics at the Strait of Istanbul[9]

YEAR	Total	Used Pilot	SP report	Longer than 200m.	Over 500 GT	Direct Passed	Tankers
1995	46954	17772	9571	6491	40724	24325	-
1996	49952	20317	12777	7236	44636	23755	4248
1997	50942	19752	15503	6487	45849	24568	4303
1998	49304	18881	24432	1943	44829	24561	5142*
1999	47906	18424	30619	2168	44354	26323	4452
2000	48079	19209	38574	2203	44734	26858	4937

*1998 value indicates all vessels carrying dangerous cargoes-including tankers.

Providing the safety of navigation in the Turkish Straits: Efforts and difficulties.

Turkish Maritime Regulations and IMO Rules and Recommendations

The most recent measures taken by Turkey to provide safety of navigation were in 1994 when the Turkish Government adopted a set of Regulations for the Turkish Straits. The Traffic Separation Schemes (TSSs) were also established and adopted by the General Assembly of the International Maritime Organization (IMO) in November 1995, in association with "Rules and Recommendations on Navigation Through the Strait of Istanbul, the Strait of Çanakkale and Marmara Sea.[10] The Turkish Straits Regulations were revised in 1998 in the light of experiences gained since implementation. According to present application of the Regulations, some basic principles for the passage through the Strait of Istanbul are as follows:

1. Tankers longer than 200 meters (loaded or in ballast) may only pass during daytime.
2. Tankers longer than 250 meters (loaded or in ballast) may only pass when opposite traffic has been suspended.
3. Vessels longer than 300 meters and towing/towed vessels are subject to special conditions of passage provided by the Administration.

The IMO Rules and Recommendations adopted in association with the TSS, provided in part that "[i]n order to ensure safe transit of vessels which cannot comply with the TSS, the competent authority may temporarily suspend two-way

[9] From the web site of Turkish Maritime Pilots' Association, http://www.turkishpilots.org.

traffic and regulate one-way traffic to maintain a safe distance between vessels"[11]; The IMO Rules and Recommendations also strongly recommended that all ships use the services of a qualified pilot in order to comply with the requirements of safe navigation.

Pilotage

Despite the strong recommendation mentioned in the Rules and Recommendations only 40 percent of vessels use pilots for their passage. As the Montreux Convention clearly states that "pilotage and towage remains optional", compulsory pilotage is not an option to increase this ratio. Consequently, the co-operation of the maritime industry is needed to voluntarily take a pilot when traveling through the accident-prone waters of the Turkish Straits.

VTMIS

A tender for a Vessel Traffic System (VTS), a radar-based vessel monitoring system, was announced on 15 December, 1998. Among those companies which submitted bids by the announced dead-line (12 April, 1999), five were found to be eligible for the tender. Lockheed-Martin was the winner.

An advanced Vessel Traffic Management Information System (VTMIS) is being established in the Straits. The system is expected to start by the end of 2001. Both the Istanbul and Canakkale Straits will be in full coverage of the radars included in the system. This system will bring better management of maritime traffic and improve the level of safety. However, despite some allegations, it will not have any effect in the volume of the traffic. The Turkish Maritime Pilots' Association, the nation-wide association of Turkish Pilots, does not believe that the VTMIS will reduce the need for the use of experienced pilots. The VTS will not change the existing hazards of navigation in the Turkish Straits but will assist in better management. Pilots should take part in the advice-giving process that will be made at VTMIS centres.

Oil reserves and existing and planned oil pipelines for oil transportation from the region

The challenge to navigational safety at the Turkish Straits posed by oil transportation originates from the Caspian Region, the new energy centre of the world. The Caspian Region, viewed by some as the "new Persian Gulf", is at the crossroads of Europe, the Near East and Asia. It is the largest unexploited source of oil in the world.[12] The first oil boom in the Caspian Region was in the late 1800's.

[11] IMO Assembly Resolution A.827(19) adopted in 1995.

[12] BERKOWITZ, Steven M., *US Policy and Geopolitics of Caspian Oil Exports: Pipe Dreams and Export Alternatives*

and Russians sought to minimize Western influence in the region at that time, just as it is the case today.

According to Rosemarie Forsythe, a former Director of Russian Affairs at the U.S. National Security Council, Caspian Oil is tied to, and will affect, issues central to current and developing international relations including the political and economic future of Turkey, as well as the political and economic future of Russia, and its behaviour towards neighbours and former Soviet republics[13].

As an overview, proven oil resources are 6 billion tons; and possible oil reserves are estimated to be anywhere from 42 billion tons to 200 billion tons. The main oil fields are located in Azerbaijan, Iran, Kazakhstan, Russia, Turkmenistan and Uzbekistan[14] (Only oilfields in or near Caspian Region included). Total oil production in the region was 85 Million tons and net exports were 55 million tons in the year 2000; however; this amount is expected to increase to 258 million tons for production and 212 million tons for net exports in year 2010.

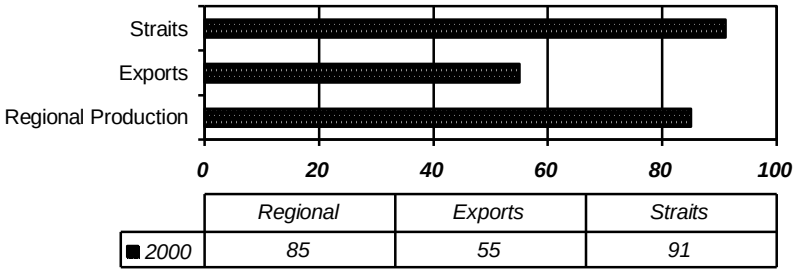

Fig. 1. Relation amongst Regional Oil Production, Regional Oil Exports and Oil Load of Turkish Straits in Year 2000 (Million Tons).

Oil from the Caspian currently represents only some 3% of world supplies, but the main supply is expected to begin flowing from the region in 2005. Transportation of vast amounts of oil to western markets from the land-locked Caspian is yet an unanswered question for the Region, as it was one hundred years ago, when the first oil market boomed.

Since the early Caspian oil flow began in 1996, the Turkish Straits have been used as the main route for the early production oil. Turkey was quick to strongly object to this because of the high risk of oil tanker accidents. Foreign Minister Ismail Cem and other Turkish officials repeatedly announced that "the Straits cannot turn into a

[13] FORSYTHE, R., The Politics of Oil in the Caucasus and Central Asia: Prospects for oil exploration and export in the Caspian Basin, Adelphi Papers, 1996, p.6

[14] Source: United States Energy Information Administration

virtual pipeline just because some oil companies want to make more money" [15]. At this point, it will be worth examining the proposed and existing oil pipeline routes in the region.

Baku-Supsa Oil Pipeline: The 830-km (516 miles) Baku(Azerbaijan)-Supsa (Georgia) pipeline, which was commissioned in April 1999, is pumping at full capacity and carries all of the BP Amoco-led Azerbaijan International Operating Company's 115,000 barrel per day (bpd) production. The $560-million line has an annual capacity of five million tons of oil.

Fig. 2. Existing and proposed pipelines & maritime routes in the region.

Khasuri-Batumi Oil Pipeline: This pipeline will start from the Port of Dubendi (Azerbaijan) and end at Batumi (Georgia) with a length of 231 km and capacity of 9 mtpy. Chevron signed an agreement in September 1999 to rebuild the existing Khasuri-Batumi oil pipeline in 18-24 months for USD 100 millions.

Baku-Novorossiysk Oil Pipeline: In the year 2000, the capacity of this pipeline was increased from 5 million tons per year (mtpy) to 12 mtpy by the construction of a new oil pipeline for Chechnya-bypassing. A tripartite agreement

[15] The Associated Press, Wednesday, October 21, 1998

between, Russia, Chechnya and Azerbaijan, on the transportation of Azeri oil through the Baku-Novorossiysk pipeline was signed in Baku in 1997.

Tengiz-Novorossiysk Oil Pipeline: This 1500 km (930 miles) pipeline is planned to start pumping in July 2001. Its capacity will be 36 mtpy for phase I and is expected to rise to a peak level of 83 mtpy by the year 2015. The total cost of the pipeline will be 4.2 billion USD. Equity in TCO (Tengizchevroil) is split 50 % to Chevron of the United States, which is serving as the operator of the project; 25 % to ExxonMobil of the United States; 20 % to Kazakhoil; and 5 % to LUKArco, a joint venture set up by Russia's LUKoil and ARCO of the United States.

Baku-Ceyhan Oil Pipeline (Project): This is the most likely project in the terms for decreasing the oil burden on the Turkish Straits. With a length of 1726 Km and capacity of 65 mtpy its cost is estimated at 2.5 billion USD. The Istanbul Accord was signed in November 1999 to build the line along the Baku-Tbilisi-Ceyhan route. Completion is targeted in 2004-2005.

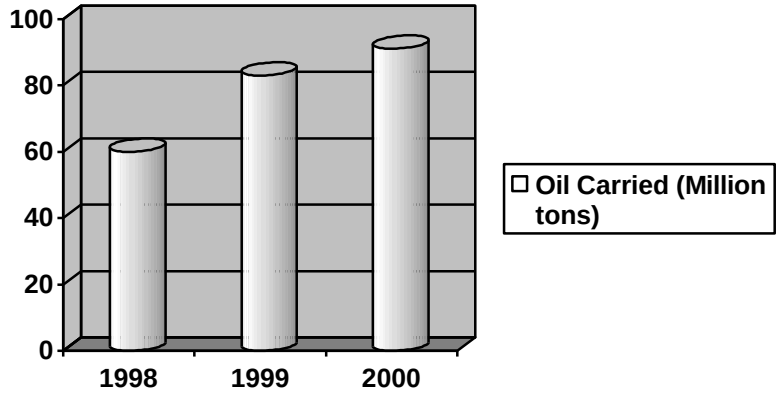

Fig. 3. Oil flow through the Turkish Straits.

CONCLUSIONS

As the Caspian region gradually becomes the new energy centre of the world, should industry demand to sacrifice the safety in the Straits According to BP, one of the major industrial actors in the region, "…industry cannot rely solely on the Turkish Straits for oil exports strategy[16]." This view is increasingly being shared in the oil industry and it is foreseeable that in the near future alternative routes for transportation of oil from the Caspian will be realized. While the efficiency of oil resources to feed the Baku-Tbilisi-Ceyhan oil pipeline is being discussed, it is often

[16] Captain Noel G Hart, Marine and Technical Assurance Manager of BP Shipping, *BP's View of the Turkish Straits*, CSIS, November 28, 2000, document can be found at www.csis.org

omitted that the estimated export capacity of the region in year 2010 will be 212 million tons and that will triple the tanker passage in the Straits. Apart from its clear challenge to life and to the environment in the Straits, this will also create more suspension of traffic in the Straits for other types of cargoes as well in the very near future. In ancient times, Jason was able to navigate through the Straits only with the help of Poseidon, the God of the Seas; even today's larger and more powerful ships, which cannot even be compared to the smaller vessels of Jason's time, still appear to need the help of Poseidon to pass safely through these waterways.

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REFERENCES

BROOKS, F., 1997. Jason and the Argonauts. Usborne Publishing Ltd, London, 44-52.

DALY, J., *Oil, Guns and Empire: Russia, Turkey, Caspian New Oil and the Montreux Convention*, Article, Kansas State University

DELUCA, Anthony R., *Great Power Rivalry at the Turkish Straits*, Columbia University Press, 1981,1

KINZER, S., January 11,1998. *Turks fearful of an oil disaster as Bosporus gets busier*, The New York Times.

ORAL, N., Speech at panel "*The Transportation of Caspian Oil to Western Markets: The Turkish Role*", available at www.csis.org

OZTURK, B., Speech at panel "*The Transportation of Caspian Oil to Western Markets: The Turkish Role*", available at www.csis.org

TURKISH MINISTRY OF FOREIGN AFFAIRS, Web Site, http://www.mfa.gov.tr

TURKISH MARITIME PILOTS' ASSOCIATION, Web Site, http://www.turkishpilots.org

SHIP ORIGINATED POLLUTION IN THE TURKISH STRAITS SYSTEM

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ABSTRACT

The Turkish Straits System (TSS) consists of the Straits of Istanbul (Bosphorus), Canakkale (Dardanelles) and the Marmara Sea, connecting the Black Sea and the Mediterranean Sea. This system plays three major ecological roles as a biological corridor, a biological barrier, and an acclimatization zone. The health of this system is vital for the protection of the Black Sea and Mediterranean Sea and their marine biodiversity. However, due to various environmental problems, some marine species are under threat in the TSS. Among those problems, ship originated ones are most serious as the TSS is one of the busiest waterways in the world. The ship originated pollution in the TSS is mainly due to oil spill, ship accidents, introduction of exotic species, noise pollution, tributyltin (TBT), litter, bilge water and air pollution. The TSS should be declared and protected as a Particularly Sensitive Sea Area based on the ecological and others criteria.

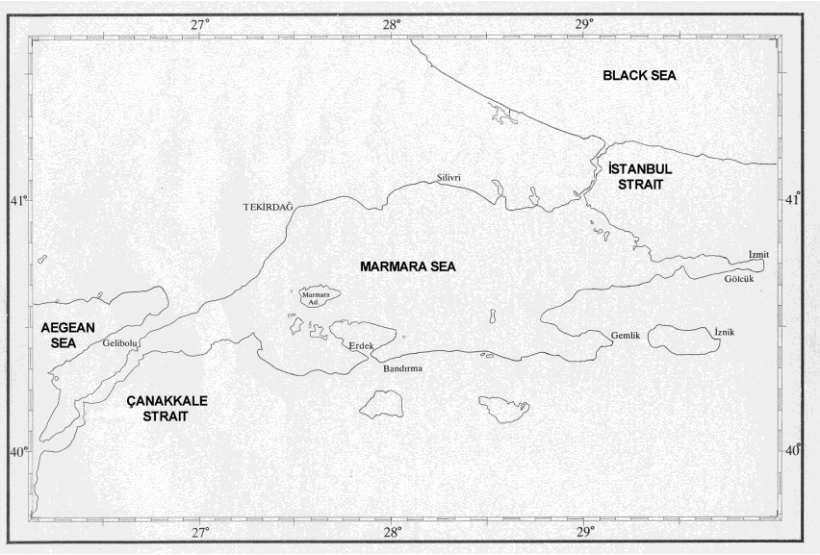

Fig. 1. The Turkish Straits System (TSS).

INTRODUCTION

The Turkish Straits System (TSS; Fig. 1) is a 278-km-long and 75-km-wide inland sea between the Mediterranean and Black Sea. The TSS includes the Straits of Istanbul (Bosphorus), Canakkale (Dardanelles) and the Marmara Sea. The total coastline is about 1025 km, including 23 islands. The surface area is about 11,350 km^2 and it has a volume of 3,380 km^3. The TSS plays significant roles in the protection of the biodiversity of both the Mediterranean and Black Sea basins due to its ecological peculiarities mentioned below.

Firstly, the TSS serves as a barrier between the Aegean and Marmara Sea as well as between the Marmara and Black Sea. For example, the distribution of the Mediterranean endemic seagrass, *Posidonia oceanica*, is limited by the Canakkale Strait. On the other hand, the harbour porpoise, *Phocoena phocoena*, lives mostly in the Black Sea and partially in the Marmara Sea. Its southernmost distribution is limited by the Canakkale Strait (ÖZTURK and ÖZTURK, 1996). The TSS is a major barrier for invertebrates as well. For example, cephalopods and horny corals common in the Aegean Sea are not seen in the Black Sea.

Secondly, through the TSS as a biological corridor, Mediterranean species of phytoplankton and zooplankton penetrate into the Black Sea with the Bosphorus underflow (KOVALEV et al., 1976). NALBANTOGLU (1957) found typical Mediterranean zooplanktons in the stomach contents of *Scomber scombrus* in the Black Sea, Bosphorus and Marmara Sea; such as *Muggiaea kochi*, *Solmundella mediterranea*, *Eucalanus crassus* and *Calanus tenuicornis*. According to SOROKIN (1983), about 20 species of Mediterranean origin zooplankons ride the deeper Bosphorus current from the Sea of Marmara into the Black Sea. Vice versa, zooplanktons of the Black Sea origin, such as *Paracalanus parvus* and *Acartia clausi*, are also found in the Aegean Sea.

This corridor serves for the penetration of Atlanto-Mediterranean orginated fishes into the Black Sea, such as *Sarda sarda*, *Thunnus thynnus*, and *Pomatomus saltator*. In general, this migration originates from the Mediterranean and Aegean Sea to the Black Sea in spring and returns to the Marmara and Aegean Sea in autumn. Dolphins and sea birds enter the TSS following these migratory fish.

The Istanbul Strait acts also as an acclimatization zone for the Mediterranean species. Among 1785 zoobenthic species in the Black Sea, 150 species of Mediterranean origin are exclusively found in the limited area near the mouth of the Istanbul Strait. This implies that these 150 species expanded their distribution to the Black Sea through the straits where they were acclimatized gradually to the environmental conditions of the Black Sea (CASPERS, 1968).

Until the early 1970s, the straits were biologically the richest and the most productive region. Among the fishes caught, *Pomatomus saltator, Sarda sarda, Trachurus trachurus, Mullus barbatus, M. surmuletus, Lichia amia, Gaidropsarus mediterraneus, Mugil cephalus, Psetta maxima, Scomber japonicus, Xiphias gladius, Atherine boyeri, Thunnus thynnus,* and *Acipenser sturio* were the most numerous. Among these species, *A. sturio, S. scombrus, X. gladius, P. maxima, P.*

saltator, L. amia, A. boyeri, G. mediterraneus are disappearing from the TSS. However, the cause of the decline of the fish populations is not only related to overfishing, illegal fishing methods and ship originated pollution, but also to organic pollution, changing hydrological regime and other ecological disasters. Heavy marine traffic covers the fishing ground in nearly all bays or inlets of the straits, making it difficult to fish.

Pollution load of the TSS is very closely related to the adjacent seas. Industrial and domestic pollution comes mainly from the Black Sea, which receives pollutants from eastern and central Europe through major rivers such as the Danube, Dnieper and Dniester. Due to heavy load of pollution, the Marmara Sea already became a eutrophic water mass (ÜNAL et al., 2000).

SHIP ORIGINATED PROBLEMS

The TSS is one of the busiest shipping ways in the world, linking the Black Sea and the Mediterranean Sea. Almost 50,000 ships passed the Istanbul Strait in 2000, 5 % of which were supertankers more then 200 m in length. Bearing this in mind, we review the ship originated problems from the environmental point of view in the TSS.

Ship accidents and oil spill

Ship accidents in the TSS are examined mainly under four categories: collision, grounding, fire and stranding. Each has a distinct effect on the marine ecosystem.

Collision is the dominant type of accidents in the area. It is caused by poor visibility and strong currents which result in navigation failure. One of the largest collisions occurred in 1979 between the Greek cargo ship Evriyali (weight 10,000 t DWT) and the Romanian tanker Independenta (weight 165,000 t DWT) which was carrying 94,000 tons of Libyan crude oil. The collision occurred at the entrance of the Marmara side of the Istanbul Strait. This was by far the largest sea accident in Istanbul, causing heavy air and sea pollution in the Istanbul area and the Sea of Marmara. The maximum accumulation of particles during the fire reached up to 1000 mg/m³ in the air which was at least four times greater than the permissible limit set for human health. Heavy oil contamination formed on the surface of the sea and on the shores of the Marmara and Istanbul Strait (Fig. 2). It was estimated that 30,000 tons of crude oil was burned, the remaining 64,000 tons spilled into the sea. As a consequence of the rapid evaporation of the light components, the spilled crude oil sank rapidly to the bottom. An area of the sea bottom, approximately 5.5 km in diameter, was covered with a thick tar coat of a mean concentration of 46 g/m². Within this area, only nine species of benthos were recorded alive and mortality rate was estimated at 96 % (BAYKUT et al., 1985).

Another disastrous accident that occurred in 1994 was between the Kavaks (in the Istanbul Strait). The Nassia incident resulted in the discharge of 20,000 tons of oil in the Black Sea, Bosphorus and Marmara Sea (Fig. 2). The marine

environment was greatly affected. Due to the low self-cleaning capacity of the shores of the strait, most bays and beaches were covered with oil and pitch. Following this accident, oil levels in the tissues of *Mytilus galloprovincialis* in the Istanbul Strait were as high as 250 µg/g-dry weight (GÜVEN et al., 1995). At least 1500 sea birds died coated with oil, although this number is probably underestimated.

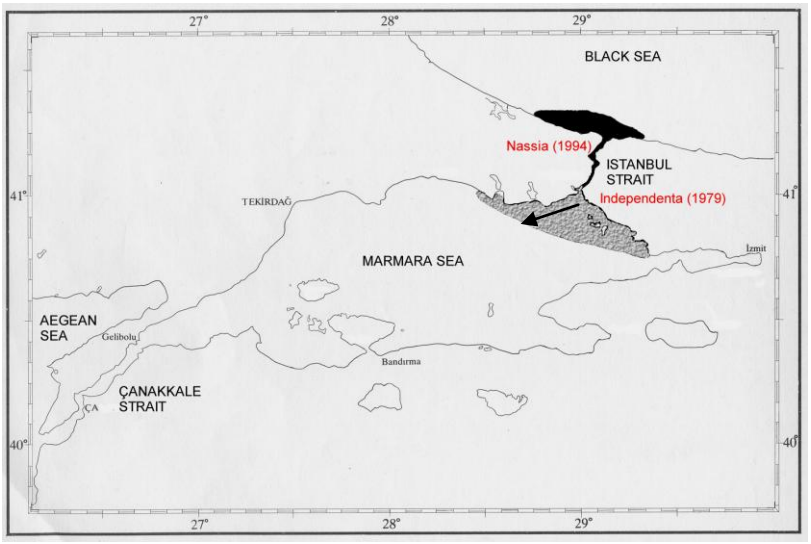

Fig. 2. Dispersion of oil spilled by Independenta (1979) and Nassia (1994) accidents.

Some of the accidents result in different type of pollution, for example, Rabunion-18 was carrying 20,000 live sheep when it sank after colliding with a Lebanon vessel in the Istanbul Strait in 1991. The sunken sheep decomposed at the bottom of the accident area and caused hypoxia. Due to the hypoxia, the populations of some organisms, such as *Mullus surmuletus, M. barbatus, Rapana thomasiana, Mytilus galloprovincialis* and *Crangon crangon*, showed mass mortality. Dissolved oxygen level was measured at 2 mg/l and water transparency value at 0.5 m (YURDUN et al., 1995).

Second type of accidents in the Istanbul Strait is grounding, often due to the failure in manoeuvring in narrow areas, strong currents and mechanical problems. Grounding is dangerous especially for the benthic organisms living in coastal areas, such as mussel beds and vulnerable sea grass.

The most recent major accident in the TSS was that of the Volganeft –248 (4,093 DWT), a Russian river ship which broke in two off the port of Ambarlı near Istanbul City on 29 Dec. 1999 due to the bad weather and poor condition of the

vessel. The vessel was reportedly carrying 4,365 tons of heavy fuel oil loaded in Burgas, Bulgaria. During the accident, 1,279 tons of fuel oil was dispersed to the Marmara Sea, 5 km beach and rocky coastline was polluted. The oil entered the nearby lagoon and wetland as well as the freshwater reservoir of Istanbul City. Much of oil stranded on beaches also quickly became buried underneath the fresh deposits of sand, creating a layering effect. At many places along the seashore, a distinct 1-4 cm layer of burried oil was found running at the bottom of 3-30 cm under the surface.

Ecological damage of this accident was 90 % total mortality of the benthos, including algae *Codium tomentosum*, *Cystoseira barbata*, *Cystoseira crinita* and *Ulva lactuca*, sea stars, such as *Astropecten* and *Marthesterias* spp., molluscs such as *Mytilus galloprovincialis, Ostrea edulis, Solen ensis, Patella vulgata*, crustaceans, such as *Crangon crangon, Idotea baltica* and *Paneaus* sp., and fishes, such as *Gobius niger, Solea vulgaris, Mugil cephalus*, and *Trigla lucerna*. A minimum of 3000 specimens of sea gulls, ducks and cormorants were found dead.

The affected area in Florya is used for the recreational purposes therefore, several restaurants and seaside cafes were affected by the spill.

Ship generated pollution results in disastrous impacts on the phytobenthos. In 1994, *Ulva rigida* and *C. tomentosum* were affected by oil dispersion caused by the Nassia collision mentioned above and they stranded as a result of mass mortality. There was once a high diversity of brown, red and green algae along the Bosphorus coast, but eutrophic-tolerant species with short seasonal life cycles, such as the green alga *Enteromorpha intestinalis,* now dominate. The brown alga, *C. barbata,* once dominant on rocky shores, is now nearly extinct. The cover of the sea grass, *Zostera* spp., has decreased drastically in recent years due to the coastal bivalve fisheries and boat anchorage. Destruction of the *Ulva rigida* community caused a decline of *C. crangon* population (ÖZTÜRK, 1995). Species as *C. tomentosum*, *C. barbata*, *C. crinita* and *U. lactuca* species are vanished in the affected area after the Volganeft accident in 1999.

Exotic species

Ships cause another environmental risk, which is introducing exotic species. They are generally carried by tanker ballast water or in fouling of ships' hull. Some species find their niche in the ecosystem of the Black Sea or TSS without causing too many problems, while others are harmful to the native fauna and flora.

For example, in the late 1960s, *Rapana venosa* (sea snail) appeared in the Black Sea. This species was brought with ship ballast water from the Sea of Japan. In the absence of a natural predator in the Black Sea, the population grew rapidly, feeding on mussels, oysters and clams and expanding into the Marmara Sea and Straits (ÖZTÜRK, 1998). As a result, all oyster and mussel beds were made extinct in the Marmara Sea during 1990 and the stocks of these two commercial mollusc species have not fully recovered yet.

The most problematic exotic species in recent years in the Black Sea has been Ctenophore *Mnemiopsis leidyi.* It was transferred by ballast water from the Atlantic coast of North America in 1987. This species penetrated to the TSS and has been the cause of depletion of the pelagic species. Besides, the most important fresh water reservoir supplying to the Istanbul City is infected with *Mnemiopsis* and it is the cause of the problems for the water supply pipes in Büyük Çekmece. This area is also one of the most important wetlands for the Marmara region. This comby jelly affected badly the ecosytem of pelagic and benthic in the Black Sea. *Mnemiopsis* is a predator and feeds mainly on pelagic fish eggs and larvae, such as anchovy, spratt, mackerel, and bonito. Consequently, the population of those fish drastically decreased. Comby jelly is spreading also in the Mediterranean Sea (KIDEYS and NIERMANN, 1994).

Guidelines for the control and management of ships' ballast water to minimize the transfer of harmful aquatic organisms and pathogens are needed. Resolution A.868 (20) suggested to ballast water sampling from the ships (IMO, 1998a). However, controlling the exotic species invasion is not easy for several reasons, such as mass tanker traffic, sampling difficulties and lack of harmonised procedures for the ships.

Air pollution

Even no accurate data are available, the prevention of air pollution from ships are clearly one of the major tasks currently for avoiding greenhouse effect by gas emission from ships. Average sulfur content of residual fuel oil in the gas emission should be monitored in the TSS.

TBT compounds

Tributyltin (TBT) compounds used in antifouling paint on ship's hull are also great threat for marine life, especially gastropods such as *Rapana venosa* and *Littorina* sp., as they cause reproductive failure called 'imposex'. Even there is no data on TBT and its influence in the TSS, TBT concentration can be high due to the heavy traffic. Antifoulings containing TBT on vessels less than 25m in length are already prohibited in many countries. Applications of all antifoulings containing TBT (or any other organotin compounds used as biocide) will be banned throughout the world by 2003 and a complete ban on the presence of these products as antifoulings on ship's hull will be placed by 2008 according to the IMO regulation (IMO, 1998b).

Litter and bilge water

Litter and bilge water unloaded to the sea are complex in origin and they pollute the seashore, depending on the type of the garbage, either by dispersing on the surface or by gradually stranding to the shores after sinking or suspending. Due to massive

ship traffic in the TSS, many plastics, pet bottles, nylons and other litters are found in the water. Beaches around the mouth of the Black Sea, such as Riva, Poyraz and Altinkum, are under the influence of such pollutants originated from ships in the TSS (ÖZTÜRK and ÖZTÜRK, 1996).

Noise pollution

Noise pollution by the passing ships is a threat for sensitive ecosystem of the TSS, creating acoustic disturbances. It is potentially threatening cetaceans as they largely depend on the acoustics for communication and feeding. There are three cetaceans in the TSS, *Tursiops truncatus, Delphinus delphis* and *Phocoena phocoena*. The cetaceans are disturbed mostly by speed boats and fast ferries (KOFAED and MIKELSEN, 1997). This could be one of the reasons why dolphins are not commonly seen in the Istanbul Strait anymore.

CONCLUSION

Ship originated pollution and growing number of ships passing the TSS is a great threat not only for the marine biodiversity of the TSS but also for the Black Sea and Mediterranean Sea basins. The Marmara Sea is a hatchery for many pelagic fishes which have commercial importance, such as bonito, bluefin tuna, mackerel, and bluefish. These fishes migrate to the Black Sea and are caught by all Black Sea countries. The increased pollution causes a decline of the fishery yield, thus reduction of the income of the reparian countries. Besides, it should not be forgotten that any destructive sea accident will effect the Aegean Sea in tourism, aquaculture and fisheries industry. These industries are vital for both Turkey and Greece. Therefore the environmental risk in the TSS should be mitigated by national and international efforts. Alternative shipping routes should be considered for the hazardous, toxic and dangerous cargo for the protection of Istanbul, a world heritage, and other cities of Marmara and industrial points of Turkey.

It should always be kept in mind that the Istanbul Strait has peculiar navigational characteristics and the passage can be dangerous for supertankers. Therefore, carrying Tengiz oil to Novorossiysk on the Black Sea and passing through the TSS is an inevitable risk for Turkey and other reparian countries in the area.

To protect the TSS, it should be declared and protected as a Particularly Sensitive Sea Area according to the IMO/MEPC guidelines and other international conventions such as Marpol 73-78 and World Biodiversity Convention (ALGAN and SAV, 2000).

REFERENCES

ALGAN, N., SAV, Ö., 2000. A new understanding in the protection of the environment of the Turkish Straits: A particularly sensitive sea area. In: ÖZTÜRK, B., KADIOĞLU, M., and ÖZTÜRK, H. (eds.), Marmara Denizi 2000 Sempozyumu. Turkish Marine Research Foundation, Istanbul, p.55-68.

BAYKUT, F., AYDIN, A., ARTUZ, I., 1985. Tanker yangınlarının doğuracağı çevre sorunlarının bilimsel açıdan incelenmesi. İstanbul Universitesi Çevre Sorunları Araştırma Merkezi Yayınları, No 1, 60p. In Turkish with English summary.

CASPERS, H., 1968. La macrofauna benthique du Bosphore et les problemes de I'infiltration des elements mediterraneens dans la mer Noire. *Rapp. Comm. int. Mer Medit.*, 19,2: 107-115.

GUVEN, K. C., UNLU, S., OKUS, E., DOGAN, E., 1995. Oil contamination of *Mytilus galloprovincialis* after the *Nassia* accident. *Turkish J. Mar. Sci*., 2-3: 67-69.

IMO. 1998a. Guideline for the control and management of ships ballast water to minimize the transfer of harmful aquatic organisms and pathogens. Resolution A. 868 (20), London.

IMO. 1998b. MEPC 42nd Session. Harmful effects of the use of anti-fouling paints for ships. IMO, London.

KIDEYS, A. E., NIERMANN, U., 1994. Occurrence of *Mnemiopsis* along the Turkish coasts (from northeastern Mediterranean to Istanbul). *ICES J. Mar Sci*., 51: 423-427.

KOFAED, H., MIKELSEN, A.C., 1997. Wake wash from fast ferries in Denmark. In: Proceedings of the Fourth International Conference on Fast Sea Transportation. Baird Publications, Sydney, p. 471-478.

KOVALEV, A. B., GEORIEVA, L. B., BALDINA, E. P., 1976. Effect of water exchange through the Bosphorus on the composition and distribution of plankton in the adjacent seas. In: BELYAEV, V. I. (ed.), Study of Water Exchange through the Straits of Turkey and Bosphorus. Naukova Dumka, Kiev, p. 181-189. In Russian.

NALBANTOGLU, U., 1957. Contents of the stomachs of mackerel (*Scomber scomber* L.) caught in the Marmara, the Bosphorus and in the areas of the Black Sea bordering the Bosphorus. Proceeding and Technical Papers, General Fisheries Council for the Mediterranean, FAO, Rome, No 4: 181-192.

OZTURK, B., 1995. The Istanbul Strait, a closing biological corridor. In: SOYSAL, I. (ed.), Turkish Straits, New Problems, New Solutions. ISIS Ltd, Istanbul, p.145-154.

OZTURK, B.(ed.), 1998. Black Sea Biological Diversity, Turkey. UN Publications, New York. 144pp.

ÖZTÜRK, B., ÖZTÜRK, A. A., 1996. Biology of Turkish Strait Systems. In: BRIAND, F. (ed.), Dynamics of Mediteranean Straits and Channels. CIESM Science Series No.2, Bulletin de l'institut oceanographique, Monaco, No Special 17: 205-217.

SOROKIN, Yu. I., 1983. The Black Sea. In: KETCHUM, B. H. (ed.), Estuaries and Enclosed Seas (Ecosystem of the World 26). Elsevier, Amsterdam, p. 253-292.
ÜNAL, E., SHMELEYA, A., ZAGORODNYAYA, A., and KIDEYS, A. 2000. Zooplankton structure and Copepod species of the Sea of Marmara in spring 1998. In: ÖZTÜRK, B., KADIOĞLU, M., and ÖZTÜRK, H. (eds.), Marmara Denizi 2000 Sempozyumu. Turkish Marine Research Foundation, Istanbul, p. 450-460.
YURDUN, T., KALEAGASIOGLU, F., GUVEN, K. C., OZTURK, B., 1995. Investigations on the pollution of Istanbul Strait (Bosphorus) by M/S Rabunion-18 sunk with live sheep. *Turkish J. Mar. Sci*., 1: 57-63.

OIL TRANSPORT IN THE TURKISH STRAITS

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In mid-October 2000, BP, along with a group of other companies signed an investors agreement with each other and then transit agreements with Turkey, Georgia and Azerbaijan, marking a major step forward in the realization of the Baku-Tblisi-Ceyhan oil pipeline. This milestone represented the culmination of a tremendous effort by all the involved governments and companies. There are many who doubted that we would be able to progress this far - and it has been true, that like the pipeline route itself there have been many ups and downs. But the fact that we are now nearing completion of basic engineering of the line is testament to everyone's commitment to continue working with the regional countries in making BTC a reality. Within the next few weeks the decision to move to the next, detailed engineering phase of the BTC project will be required to enable the participants to prepare for start of construction in mid-2002 and the start of oil transportation to Ceyhan by 2004.

I think it is fair to say that BP has been the leading company in this effort, and there is absolutely no change in our intentions with respect to BTC. I would also like to take this opportunity to specifically recognize the commitment of the Turkish Government to the BTC project.

Let me assure you that BP is putting leadership, resources and capital behind this project which in a large part is to relieve the burden on the Turkish Straits.

At the same time, there is a risk of additional tanker movements through the Turkish Straits from further Caspian exploration and development, Black sea trading and growing non-oil traffic. So, while working on BTC, we, Turkey and others must also look at responsible preventative measures to protect this crucial waterway.

With this background I would like to give you BP's views on shipping through the Straits, what we see as problems, and some potential solutions.

First, what is BP's position on shipping through the Turkish Straits?

BP is of the opinion that we, and industry, cannot rely solely on the Turkish Straits for oil exports. We cannot rely on the Turkish Straits due to the risks of disruption from accidents and spills, and some of these accidents could well be from ships other than tankers. The risk of a serious accident in the Straits to shipping is running at about one every two years - this is too high to be acceptable. Everyone involved has a role in ensuring this risk is reduced. Constant improvement in safety measures are needed in the short, medium and long term to guarantee the Straits as a

vital waterway for all stakeholders benefit. With the increase in Caspian oil volumes, potential further Black Sea trading and the growth of non-oil shipping, realistic solutions will be required.

What has BP done to improve the safety of navigation in the Turkish Straits?

We have conducted a study of shipping incidents and found that collisions and groundings are the most frequent type of accident. Based on that information we looked at safety measures that we could implement in-house and secondly those that require external support.

Let me tell you what we have done in-house for our own fleet and all BP chartered vessels:
All tankers on BP business must comply with Turkish transit guidelines; these are practical, realistic and effective and include such things as:

- Recommended pilotage for transits of the Bosphorus and Dardenelles
- Controlled traffic flow when visibility is less than one mile
- Maximum speed limit of 10 knots over the ground
- Daylight only transits for larger and deep draught vessels
- Closure of the Straits to hazardous shipping when visibility is less than one mile

BP has adopted these guidelines as our minimum policy requirements. I must stress that we insist on pilots for all our transits, and we would encourage others to do so.

These policies were implemented about two years ago and are being complied with by all ships carrying our cargoes. Additionally, ships we charter must of course pass our ship vetting (screening process) which we hold up as leading the industry on safety and quality standards.

Next, I'd like to talk about other safety measures that BP can't implement on its own:

First, we encourage all Straits users to employ pilots; data indicates that around 60% of all ships transiting the Straits do so without a pilot. This coupled with the fact that collisions and groundings are the greatest cause of accidents lead us to conclude that all ships transiting the Turkish Straits must employ a Turkish pilot. In fact, 85% of incidents occur on ships without a pilot on board. A trained pilot, who knows the waters and their dangers, a trained pilot who understands and can anticipate how his colleague on the bridge of the other ship is going to act, and most importantly the ability to communicate in a common language is a great safety improvement.

We recognize some ship owners and chatterers are reluctant to take on pilots, however, our studies show that if we can solve this problem we can reduce the risk of accidents by at least 40%. This is worthy of much thought and effort.

Through OCIMF, the Oil Companies International Marine Forum, BP has requested that the Navigation and Routing Sub-Committee assess the full spectrum of factors and develop an industry position on safety of navigation in the Straits. This Committee is drawn from a number of major companies active in the Caspian, and work is commencing imminently.

The second safety measure is to install and maximize the value of the Vessel Traffic Management System, or VTS.

Historical data shows that per million transit miles we have seen :

6 accidents in the Bosporus versus
3 accidents in the Suez Canal, and
0.2 accidents in the Mississippi River

These are quite startling statistics - they show us how relatively more dangerous the Bosporus is and they show us what is possible if certain safety measures are adopted. For example, in the Mississippi River, they were able to reduce their accident frequency by an order of magnitude after implementing a fully integrated traffic management system that included a VTS.

The VTS will provide the opportunity to anticipate traffic congestion and regulate traffic flow. It will also greatly enhance the pilot's ability. The contract for this system was let in late 1999 and I believe that it is hoped to have the system up and running by mid next year. This is welcome news and we look forward to having the system fully operational then.

The third safety measure we propose is to improve ship quality & mechanical reliability. This is an area where BP can and will help. As I mentioned, BP Shipping's ship vetting and inspection program is one of the toughest in the industry and I can assure you that no vessel chartered by BP will enter the Straits or Black Sea without having passed this rigorous screening process. Data shows that ships not on our approved list are six times more likely to incur a casualty than those that are approved by us, and I am conservative with this claim.

Empowering the pilot to conduct a pre-transit check of the ships' bridge navigation and communications systems, and main engine controls prior to commencing the transit would be an extremely valuable additional "on the spot" quality assurance tool.

If we could implement the three measures I've discussed;

a) all vessels to take a pilot,
b) install and maximize the value of the VTS, and
c) improve vessel quality and reliability,

then our studies indicate that we could potentially reduce the risk of an accident by 66%. This would bring the risk of an accident in the Straits below that of the Suez Canal.

There are other important issues and details that we could discuss but I'll stop here today. I know that the single requirement for all ships to take a pilot will not be easy to put into action.

I'm not here to provide prescriptive solutions - but, what I am here to say is this, we in BP are totally committed to improving safety in the Straits and that we can be counted on to support Turkish lead efforts to implement these measures.

In summary:

i) BP is of the opinion that we, and industry, cannot rely solely on the Turkish Straits for oil exports.
ii) We have implemented in-house policies for our own and chartered vessels, including a stringent screening process for the chartered vessels.
iii) We have instigated an industry approach to safety issues and standards for tanker traffic through the Straits.
iv) We believe that a requirement for all vessels to take a pilot, installing and using fully the facilities of the VTS, and improving vessel quality is the key measure to improving safety.

Ladies and gentlemen, we have all seen the recent incidents in Europe and elsewhere around the world which have brought home to us the possibility that a major incident exists. Let us hope it never happens in the Turkish Straits. But hope is not enough and we must be proactive – not reactive - to such a possibility. BP will continue to play its part, and provide leadership to help others do theirs.

THE PASSAGE OF VESSELS CARRYING HAZARDOUS CARGO THROUGH THE TURKISH STRAITS

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ABSTRACT

The aim of this paper is to explain the regulatory framework of the passage of nuclear powered vessels and vessels carrying nuclear, dangerous, noxious cargo or waste through the Turkish Straits both under Turkish Law and international law. The passage of such vessels and cargo is regulated under Article 30 of the Maritime Traffic Regulations for the Turkish Straits and The Marmara Region 1994 (herein after 1994 Turkish Regulations). However, the article caused series problems between Turkey and the user states of the Turkish Straits. As a result in 1998 Turkey revised this provision. In this paper we will firstly examine Article 30 and the reasons for its amendment. Secondly we will consider some rules of international law which would allow Turkey to bring restrictions on the passage of vessels carrying hazardous cargo.

INTRODUCTION

Turkey has been confronted with a series of problems concerning safety in navigation, which were not anticipated when the Montreux Convention was concluded. These ultimately led Turkey to adopt new rules regulating traffic in the Turkish Straits in 1994. The stated purpose of these rules was to ensure the safety of navigation, the protection of life and property and the preservation of the environment. However, the establishment of the 1994 Turkish Regulations caused serious conflicts between the user states and Turkey, relating to their consistency with the Montreux Convention, general international law and IMO rules and recommendations. Consequently, in 1998 Turkey adopted a revised set of regulations for the straits, essentially the same as the 1994 Regulations, but aiming to abolish the legal conflicts.

The aim of this paper is to explain one of the problematic provisions in the 1994 Turkish Regulations, Article 30, which imposed authorisation requirements, and procedures on the passage of nuclear powered vessels and vessels carrying nuclear, dangerous noxious cargo or waste. The problem regarding the authorisation requirement for the passage of this type of ships was actually solved with the declaration by Turkey on November 1994 and the new regulations of 1998. The paper will therefore look at why this provision was established, whether it was in conflict with the international law and why it was necessary to amend it . The paper

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will also look at the concept of the Particularly Sensitive Sea Areas (herein after PSSA)which may bring a solution for the problem of the passage of such vessels through the Turkish Straits.

Article 30 of the 1994 Turkish Regulations

The Montreux Convention does not have any special provision regarding the passage of the nuclear powered vessels and vessels carrying nuclear dangerous, noxious cargo or waste because in the period of 1936 there was no such a serious problem. This started to be problematic for the last decades, not only in the Turkish Straits but also all around the world. As a result of this problem, nations have devoted increased attention especially to the issue of transboundary movements of hazardous waste. The number of international treaties and instruments addressing transboundary movements of hazardous waste concluded by international organisations has increased enormously. In the last 10 years states have adopted several treaties[2] addressing the issue. A comprehensive legal regime for the regulation of trade in and disposal of hazardous waste has been provided by the Basel Convention on the control of Transboundary Movements of Hazardous Waste and its Disposal of 22 March 1989. This is an important Convention because Turkey treated the Basel Convention as a basis for the establishment of Article 30 in the 1994 Turkish regulations[3]. However, this was not convincing for three reasons.

The first one is that the Convention is binding on States which are parties[4]. The rules cannot be applied to the non-party states if they are not a principle of general international law[5]. The second reason is that the Convention is vague in its wording about the requirement of authorisation[6]. Article 6.4 regulates the passage in the following way:

> Each state of transit, which is a party, shall promptly acknowledge the notified receipt of the notification. It may subsequently respond to the notified in writing, within 60 days, consenting to the movements with or without conditions denying permission for the movement, or requesting

[2] Two of them are Basel Convention and Izmir protocol

[3] Turkey declared in the IMO meetings that the Turkish Regulations require prior permission for the transboundary movement of such cargo (i.e. waste) through the area under the national jurisdiction of Turkey, in accordance with the relevant articles of the 1989 Basel Convention which require the consent of the state of transit LEG 71/12/1 8 September 1994, Glen Plant, *Navigation Regime in the Turkish Straits for Merchant Ships in the Peace Time*, Marine Policy 20

[4] Ibid., 20

[5] Except United States, all the user states of the Turkish Straits including Turkey accepted this convention. By 1997 April 110 the States ratified it. Turkey ratified the convention in 1990

[6] Plant, *op.cit.*, 20

> additional information. The State of export shall not allow the transboundary movement to commence until it has received the written consent of the State of transit.

This article shows that permission of the state of transit should be asked while these types of substances are carried through their territorial waters. However, this article gave rise to discussion among States during the negotiations. The discussion was settled in the end by the adoption of Article 4.12, a rule ambiguous in its content. Article 4.12 is as follows:

> Nothing in this convention shall affect in any way the sovereignty of States over their territorial sea established in accordance with international law, and the sovereign rights and the jurisdiction which states have in their exclusive economic zone and their continental shelves in accordance with international law, and the exercise by ships and aircraft of all states of navigational rights and freedoms as provided for in international law and as reflected in the relevant international instruments. [7]

This article refers to international law for the coastal state rights regarding passage through their territorial waters, including straits. It is therefore necessary to see what general international law says about it. General international law provides that the vessels have the right of freedom of passage through the territorial waters, including straits, without any authorisation of the coastal states. The 1982 UNCLOS is clear enough on the question of prior authorisation of passage; there is no provision allowing such an authorisation. On the contrary, a requirement of coastal state consent would imply the possibility of denying passage, in obvious conflict with the provisions forbidding coastal States to impose requirements on foreign ships.

However, when signing the 1982 Convention some of the states considered that a requirement of prior authorisation was in line with the Convention. Examples can be given from state practice and declarations at the conference. For example, Section 9 of the Act on the marine areas of the Islamic republic of Iran in the Persian Gulf and the Sea of Oman requires prior authorisation for the passage through the Iranian territorial sea for foreign warships, submarines, nuclear powered ships and vessels or any other floating objects or vessels carrying nuclear or noxious substances harmful to environment. The provision applies on the Iranian side of the Hormuz Strait[8]. Another example can be given from the Omani practice. The Royal Decree of 1981 recognised the principle of innocent passage of ships and aeroplanes of other states through international straits[9]. Upon ratification of the UNCLOS in 1989, Oman made a declaration that made no distinction between passage through international straits and passage in the territorial sea outside such straits. It

[7] ILM 1990 p 560
[8] Limits in the Seas, no 114, p 5
[9] Royal Decree of 10 Feb. 1981, Current Developments, No 1, p 78

recognised again only the right of innocent passage for warships, nuclear powered ships, ships carrying nuclear or other noxious substances and submarines subject to prior permission. The People's Democratic Republic of Yemen declared that it would give precedence to its national laws in force which require prior permission for the entry or transit of foreign warships or submarines or ships operated by nuclear power or carrying radio active materials.[10] These declarations and the examples of practice[11] may express the wish of those countries but are clearly not authorised by the text of UNCLOS.

However, as the passage of such ships could result in serious risks of pollution, special precautionary measures should be established by international agreements. This is stated in Article 23 of UNCLOS which is as follows:

Foreign nuclear ships and ships carrying nuclear or other inherently dangerous or noxious substances shall, when exercising the right of innocent passage through the territorial sea, carry documents and observe special precautionary measures established for such ships by international agreements.

In any case the prior authorisation is not provided by UNCLOS. Therefore, there is a lack in the Basel Convention. On the one hand, it established the consent of a transit state. On the other hand it restricted the rights of coastal states by referring to international law. This ambiguity of the rule encouraged divergent interpretations between certain states. For example, the Federal Republic of Germany [12], the United Kingdom[13] Japan[14] the United States expressly excluded the duty of consent of any state.

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[10] The Yemen Arab Republic adheres to the rules of general international law concerning rights to national sovereignty over coastal territorial waters, even in the case of the waters of a strait linking two seas. The Yemen Arab Republic adheres to the concept of general international law concerning free passage as applying exclusively to merchant ships. These must obtain the prior agreement of the Yemen Arab Republic before passing through its territorial waters, in accordance with the established form of general law relating to national sovereignty, Limits in the Seas, , no 114, p 5

[11] For other States' practice see, Burma, the Territorial Sea and Maritime Zones Act, 1977, s. 99 (a) Maldives, Act No 32/76 s 1, Pakistan Act of 1976, s 3 (2), China Act concerning the Safety of Maritime Traffic, 1983 s 11, Yugoslavia, Act of 1987

[12] "It is the understanding of the Government of the Federal Republic of Germany that the provisions in Article 4, paragraph 12 of this Convention shall in no way affect the exercise of navigational rights and freedoms as provided for international law. Accordingly, it is the view of the Government of the Federal Republic of Germany that nothing in this convention shall be deemed to require the giving of notice to or the consent of any State for the passage of hazardous wastes on a vessel under the flag of a party exercising its right of innocent passage through the territorial sea or the freedom of navigation in an exclusive economic zone under international law" Multilateral Treaties p 857 quoted at International Environmental

Therefore it is hard to find uniform or constant rules in the Basel Convention which could legitimise the action of Turkey. This issue forms the second reason why the Basel Convention cannot be taken as a proper basis for justifying Article 30.

The third reason is that Basel Convention regulates the passage of ships transporting hazardous waste but not the transit of other ships, which carry nuclear cargo or noxious substances. To extend the prior notification and consent procedure applicable to transboundary movements of hazardous and radioactive waste to these materials can not be accepted.

The ambiguity of the convention and the lack of provision for the environmental issues cause some countries to act unilaterally or regionally[15]. Several States asked permission for the passage of these ships from their territorial waters or straits, while the others totally banned them. For example, Haiti banned entry into its ports, territorial sea and EEZ of any vessel transporting these substances[16]. In addition, Egypt and Oman both declared that nuclear powered ships and ships carrying nuclear or other hazardous substances were required to seek permission before entering their territorial waters[17]. Following the Amico Cadiz disaster of 1978, France authorised the Maritime prefects responsible for different stretches of the French coast to ban such vessels from approaching within a specified distance up to seven nautical miles from the coast. France also imposed a similar ban in the Straits of Bonifacio[18]. Moreover, Italy imposed a ban on the passage of oil tankers and ships which were passing through the Messina Straits. Thus, a growing body of state practice suggests that not all the coastal states are necessarily confirming to the traditional freedom of navigation.

Law and Policy Series., Laura Pineschi., *The Transit of Ships Carrying Hazardous Wastes through Foreign Coastal Zones, International Responsibility for Environmental Harm* (edited by Francioni, T Scovazzi,1990) p 303

[13] The United Kingdom declared that the provisions of the convention do not affect in any way the exercise of navigational rights and freedoms as provided for in international law. Accordingly nothing in this convention requires notice or consent of any state for the passage of hazardous wastes on a vessel under the flag of a party, exercising rights of passage through the territorial sea or freedom of navigation in an exclusive economic zone under international law. *Ibid*., 857 quoted in Pineschi, 303

[14] Nothing in this convention shall be deemed to require notice to or consent of any State for the mere passage of hazardous waste on a vessel of a party exercising its navigation rights under international law. *Ibid.*, 857

[15] 1996 protocol on the prevention of pollution of the Mediterranean sea by Transboundry Movements of Hazardous Waste and their disposal, (called Izmir Protocol)

[16] Note Verbal dated 18 February 1988 from the Ministry of the Interior to the United Nations, 29 February 1988, at 13 (hereinafter Los Bulletin)

[17] Oman does not make any distinction between straits and territorial waters.

[18] Prime Ministerial Circular relative a la circulation dans Les Territoriales de Navires Transportant des Hydracarbures, 24 March 1978

DISCUSSION

Turkey being as a coastal state has the right to prescribe rules for the safety of navigation to prevent, reduce and control accidents and subsequently to do same with pollution. However, the analysis shows that Turkey does not have unlimited rights. They are limited by the innocent passage regime of the foreign vessel passing through the Turkish Straits. In other words, Turkey can take measures for the safety of navigation as long as the measures do not hamper the passage of vessels. The legal ground of this obligation is the stated provisions of UNCLOS and the Basel Convention. This is the reason why Turkey amended Article 30 of the 1994 regulations and adopted the revised Article 26 of 1998 Regulation. The question is to find a way of adopting rules which would impose the requirement of obtaining prior permission for passage of these vessels. It seems that none of the conventions provide such a provision which allows Turkey to impose this requirement . However, the concept of PSSA, which is only established in the Great Barrier Reef, could provide an answer to our question.

The concept of PSSA allows coastal States to adopt environmental measures to protect very specific sea areas[19]. PSSA originates from Resolution 9 of the 1978 International Conference on Tanker Safety and Pollution Prevention, which invited the IMO to initiate studies with a view to assessing the protection needs and the appropriate measures to achieve a reasonable degree of protection of such areas. A PSSA is defined in the IMO Guidelines as an area which needs special protection through action by the IMO because of its significance for recognised ecological, socio-economic or scientific reasons and which may be vulnerable to damage from international maritime activities[20]

PSSA are to be distinguished from the existing concept of "special areas" (MARPOL 73/78) which are largely designed for the needs of enclosed and semi-enclosed seas by prescribing operational discharges of oil[21]. PSSA may come to entail different and frequently stronger measures than special areas; indeed measures regarded as contrary to accepted principles of international law, including those restrictive of navigation for environmental purposes, might be exceptionally sanctioned by the international community in PSSA's. Under the PSSA the State can develop and adopt measures such as compulsory pilotage, vessels traffic management systems, special construction requirements, speed restrictions and restrictive passage aimed at protecting any specific areas against environmental damage from ships. There is some evidence of growing state practice in favour of increased use of PSSA. In 1990 the IMO agreed to Australia's request to designate

[19] Guidelines for the designation of special Areas and the identification of Particularly Sensitive Sea Areas, IMO Assembly Resolution A.720 (17) (6 Nov 1991)

[20] *Ibid*

[21] Patricia Birnie and Alan E. Boyle, *International Law and the Environment*, (1992) p 264-283

the Great Barrier Reef Marine Park a PSSA, which all ships over 500 grt should avoid.

Chapter 3 of the Guidelines on PSSA makes it clear that higher standards and voluntary measures should be applied in PSSA wherever possible and that they should be established only where existing forms of environmental protection measures have been considered and rejected for good reasons.

The Guidelines therefore contemplate the possibilities of higher than internationally agreed mandatory traffic measures in PSSA extending beyond the territorial waters. In other word this measures can be applied any part of the sea.

In order to be identified as a PSSA there is a need of a careful study by IMO. The area must meet at least one of the criteria established in the guidelines. The first one is an ecological criterion in which uniqueness, dependency, diversity, productivity, naturalness, integrity and vulnerability have been taken as a base; the second is a social cultural and economic criterion in which economic benefit, recreation and human dependency are used to define the terms and the final criterion is based on scientific and educational definitions in which research, baseline and monitoring studies, education and historical value are invoked.

The burden is also on the coastal State to justify why it is necessary to protect the proposed PSSA. To date, the IMO has approved only one PSSA, the Australian Great Barrier Reef[22].

However, once the area is included in this concept, the coastal state can enforce higher standards, including those which restrict the navigation for environmental purposes, than the ones established in general international law. As explained above the IMO resolution (A 17/Res.720) describes these measures as special construction requirements, speed restrictions, prohibition of cargo transfer, compulsory pilotage, etc. It should however be noted that the identification of a PSSA does not automatically results the application of these measures. For example, it does not exclude or restrict ships carrying INF code material from the area. This issue was specifically considered at both MEPC-38 and NAV-42 in July 1996. A majority of the delegates agreed that this issue should be addressed on the basis of individual proposals for PSSA identification, and not as blanket exclusion for all PSSAs[23].

Of course, the main problem is the establishment of the legal basis for the PSSA concept. The only legal ground for the establishment of the PSSA is the guidelines which do not have binding force on States[24]. The reason why States are bound by the Australian national rules is that the endorsement and the recommendation for these special measures have been adopted by consensus at the Marine Environment Protection Committee (MEPC). This can, then, be considered

[22] IMO Assembly Resolution A. 472 (14)(20Nov. 1985)

[23] NAV 42/WP.7/Add.2 (18 July 1996) and MEPC 38/WP.9 (9 July 1996)

[24] For proper acceptance of the PSSA, existing treaties should be amended and a new treaty negotiated to place PSSA and suitably modified guidelines for their operation on a conventional basis.

as an uncontested legal basisfor the implementation of exceptional measures[25]. Therefore, the rules in the Australian reefs are based on the uniform acceptance of the international community rather than on conventional recognition of the concept.

Could the Turkish Straits be included in this concept?

In order to be identified as a Particularly Sensitive Sea Area, the Turkish Straits should meet one of the criteria mentioned above. Therefore, a good start for Turkey would be first to provide evidence that the Turkish Straits can meet one of the criteria of Particularly Sensitive Sea Areas. In the author's view, this will not be difficult. The Turkish Straits can easily fulfill the conditions to be included in the PSSA. According to the scientific and the educational criteria the Turkish Straits could be accepted as an area which has historical significance, because the city of Istanbul has been declared by UNESCO as part of the common heritage of mankind with its 3000 years of history[26]. Moreover, the strait plays an important role in providing a corridor for the penetration of Mediterranean oriented organisms. At the moment, some of the species (over 150) living in the Black Sea are Mediterranean oriented[27]. In general, this migration originates from the Mediterranean and Aegean Sea in summer and returns to the Sea of Marmara and Aegean Sea in autumn[28]. Thus, today Straits have a vital importance for the continuity of the biological diversity in the Black Sea, Marmara Sea and Mediterranean. As a result of this the Turkish Straits can be included in Particularly Sensitive Sea Area due to ecological criteria in which biological uniqueness, dependency, representatives, diversity, naturalness vulnerability and productivity have been taken as a basis.

PSSA identification, by its very definition, is appropriate only when an area is vulnerable to damage from maritime activities. Therefore, an important step in the identification process is to establish that an area is indeed vulnerable to potential damage from such activities and that any protective measures adopted actually addresses that vulnerability. The several accidents which have occurred in the Turkish Straits have a distinct effect on the ecosystem. This is therefore a proof that the area is vulnerable to potential damage. It seems clear that in theory the Turkish Straits could be included in the PSSA concept. To be included in this concept is advantageous, because if Turkey adopts a national system which has higher standards than are used in international law and works towards their international acceptance, it would be less effective than active participation in an international

[25] Summary Report of the 2nd International meeting of legal experts on PSSAs, (1993), p 455

[26] MSC 70/11/17 para 11

[27] Ozturk, *The Istanbul Strait, a closing Biological Corridor,* Turkish Straits Voluntary Watch Group, 1995, 147

[28] Some of the sea animals mackerel, between the Black Sea and Marmara, Atlantic Bonito between Mediterranean and the Black Sea and finally Blue fish between Aegean, Marmara and the Black Sea migrate to feed and spawn.

process. Once Turkey is included in this system, it will be able to prevent the passage of ships carrying hazardous cargos. The Australian experience with its Great Barrier Reef Marine Park is a practical example of this.

CONCLUSION

It looks as though international law is in favour of marine nation's navigational interests. Therefore, changes must be made to existing international law to protect the marine environment. Protecting the environment has become so important that if it cannot occur within an existing framework, nations will act unilaterally, bilaterally or regionally to make it to do so. This will undermine the existing framework which accords a lower priority to environmental protection. In the light of the inadequacy of present treaty provisions, the 1994 Turkish Regulations regarding authorisation therefore was not unreasonable. However, Article 30 has been dropped from the revised regulations of 1998[29] due to the explained reasons. Above discussions show that Turkey could either unilaterally adopt higher standards like other states to protect its straits even though these rules may not be fully in conformity with the international law or apply to IMO for the inclusion of the Turkish Straits in the concept of PSSA.

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[29]Article 26:

The owner or the operator of the

a) Nuclear-powered vessels
b) Vessels carrying nuclear cargo or nuclear Wastes
c) Vessels carrying dangerous and /or hazardous cargo or wastes,

at least 72 hours before fixing a voyage through the Straits, must contact with the Administration and inform the type of cargo planned to carry with all necessary certificates which confirms the vessel is in compliance with the IMO and related International Conventions together with the certificates confirms that the said cargo is carried in compliance with her Flag State Administration Regulations.

For the safety of the a passage within the straits, Nuclear powered vessels shall take all measures informed by the Administration.

All vessels mentioned in this regulation shall load and distribute their cargoes in compliance with the related International Conventions and Codes. While navigating within the Straits ,such vessels shall hoist the International Code B flag by day and an all-round red light by night.

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USER FEES FOR STRAITS

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ABSTRACT

The growing volume of maritime traffic in general and energy based cargoes specifically has increased the dangers of a serious accident in narrow straits used for international navigation as well as increased the cost for the strait State to provide for safety of navigation and protection of the marine environment. Under international law taxes and charges cannot be levied on vessels for passage through straits. However, during the UNCLOS conferences several proposals were made for including provisions for compensating strait States for the costs of maintaining strait safe for navigation. The result was Article 43 which provides for a vague duty by user States to enter into agreements with straits States for sharing the maintenance of straits. This article reviews the development of the legal regime of passage for straits and the travaux prépatoires for Article 43. In conclusion, the author recommends that the issue of user fees be further investigated by strait States as well as possible solutions.

INTRODUCTION

I was prompted to look into the subject of user fees for straits used in international navigation after reading a very interesting article on the subject by the eminent scholar in international law and law of the seas, Satya N. Nandan.[1] He points out that:

> *The increase in traffic density through narrow channels and also an increase in the size of vessels plying through straits has imposed heavy responsibilities on strait States for ensuring safe navigation and the protection of the marine environment…and that ….the potential for disasterous accidents in the narrow waters of straits have serious economic and social consequences for coastal communities.*[2]

Over the years there has been a dramatic rise in maritime transport. It is estimated that 95% of the worlds commercial transportation is by sea. A booming

*The views expressed in this article do not reflect the views of any institution, organization or government.

[1] Nandan, S.N., The Management of Straits Used for International Navigation: International Cooperation in Malacca and Singapore Straits, Current Maritime Issues and the International Maritime Organization (Martinus Nijhoff 1999) p.27.

[2] Ibid.

global economy has also created growing energy demands and this has launched more tankers into the seas transporting more oil, more natural gas, more LNG and other energy sources around the world. The vast global network of sea transportation relies a great deal on the ease of passage provided by important straits connecting the great bodies of seas and oceans such as the Straits of Gibralter, Malacca and Singapore, Dover (Calais), Hormuz and the Turkish Straits[3].

The Straits of Malacca are the busiest Straits with approximately 300 vessels crossings per day (100,000 per year), carrying an estimated $1 trillion of commerce each year.[4] The Dover Straits follow with approximately 125 vessels per day passing north-south and 100 crossings[5], and the The Turkish Straits with approximately 125-150 vessels per day, not including an estimated 2500 local vessel movements (50,000 per year) a very close third.[6] Tankers constitute a healthy portion of these vessels. For example, in the Straits of Malacca, which form a critical maritime route for the oil from the Middle East (Persian Gulf) to the Asia, oil tankers acount for 30% of total vessel movement.[7]

The anticipated increase in oil production in the Caspian Sea Region is of concern to Turkey in how it may affect the already congested maritime traffic in the Turkish Straits. In 1998 60 million tons of Caspian oil were shipped through the Straits. This increased by 50% to 93 million tons in the year 2000.[8] Oil production out of the Caspian region is expected to reach as much as 1.4 billion barrels per year[9]. According to one analyst each 10 milion ton increment in oil requires as additional 800 tankers trips for mediım sized tankers and 200 additional tips for large tankers.[10]

Straits carry a considerable amount of the burden of world commerce. And in return, under international law, they can demand very little in return, particularly in the form of monetary compensation. As observed by Molenaar,

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[3] This is not intended to be an exhaustive list of "important" straits. There are over 100 straits deemed to be "important" straits.

[4] TED Case Studies Malacca: The Impact of Transportation on Wildlife in the Malacca Straits, http://www.american.edu/projects/mandala/TED/malacca.htm. Accurate figures are not available.

[5] Straits of Dover Coast Guard

[6] For detailed statistics see www@turkishpilots.org.tr

[7] Chia Lin Sien *Alternative Routes to the Straits of Malacca for Oil Tankers: A Financial, Technical and Economic Analysis,* Paper presented at the Work Shop on the Straits of Malacca, 24-25 January 1995 in Kuala Lumpur.

[8] Information provided by the Turkish Ministry of Foreign Affairs

[9] The United States Energy International Administration (USEIA).

[10] E.J. Hicks *Environmental Constraints on Development of Caspian Oil and Gas Resources: The Bosphorus and Caspian Sea (1998)* http://www.wws.princeton.edu/~wws401c/1998/emily.html

> *"Straits that play a key-role in international communications are a prime example of situations in which the interests of flag and coastal States collide. Unimpeded navigation through such important straits has for flag States great economic and strategic significance, while coastal States are confronted with a range of risks brought by heavy traffic, not the least of which concerns the marine environment. Accidents are more likely to happen in straits than in open spaces, and harmful substances will usually have relatively grave effects, due again to the proximity of the coastline and the frequently shallow waters.*[11]

An overview of the development of the straits passage regime in international law

Before the 1982 UNCLOS regime of transit passage was adopted article 14(2) of the 1958 Geneva Convention on the Territorial Sea and Contiguous Zone, reflecting customary international law, provided that Straits used for international navigation were subject to the passage regime of non-suspendable innocent passage.[12] Prior to the 1958 Geneva Convention the customary international law for Straits which formed part of the territorial sea of a State was subject to the same regime of innocent passage as applied in the territorial sea. Although there was discussion during the 1930 Hague Conference regarding Straits deemed to be international the general view appears to have been that the waters of a strait embraced by one coastal state whose width was less than twice the width of its territorial seas was subject to the regime of innocent passage.[13]The right of innocent passage meant that the coastal State could not interfere with or place conditions, such as requiring advance notification or authorisation, on the passage of a vessel so long as the vessel, during passage, did not engage in activity harmful or prejudicial to the peace, order and security of the coastal state. This was affirmed by the 1949 *Corfu Channel* case.[14] The 1958 Geneva Convention on the Territorial Sea and Contiguous

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[11] E.J. Molenaar, *Coastal State Jurisdiction over Vessel Source Pollution (Copenhagen 1998) p. 283.*

[12] In 1927 Judge Jessup wrote that the right of innocent passage required "no supporting argument or citation of authority" as it was "firmly established in international law." Cited in F. Ngantcha, *The Right of Innocent Passage,* (1990) p. *9; see also*, E. Brüel *Les Detroits Danois au Point de Vue du Droit International* Recueil des Cours 1936 (Tome 55) stating that D*e nos jours les regles concernant les eaux territoriales sont en principe applicable aux detroits.*p. 610; E. Brüel. *International Straits, A Treatise on International law* (Copenhagen 1947) Vol. 1 pp.200 and 217. RR Churchill and A.V. Lowe *The Law of the Sea* (Manchester Press 3rd Ed.) *1999 p.102.*

[13] J.A. de Yturriaga *Straits Used for International Navigation, A Spanish Perspective* (Netherlands 1991) pp.25-26. The main issue of debate at the 1930 Hague Conference concerned the breadth of the territorial sea; B.B. Jia, *The Regime of Straits in International Law* (Oxford 1997) 90-05; M. Giuliano, *The Regime of Straits in General International Law,* The Italian Year Book of International Law, Vol 1 1975,

[14] Corfu Channel Case (Merits) ICJ Reports 4 (1949)

Zone also included the condition that innocent passage through straits used for international navigation could not be suspended.[15] The right of innocent passage also precluded the coastal State from imposing transit fees and taxes on vessels not stopping at a port, exercising a continuous and expeditious passage through the strait.

The provisions for the regime of passage for straits used for international navigation was one of the most debated issues during the United Nations Law of the Seas Conference. The United States had offered the regime of transit passage through Straits in return for recognizing a 12 mile territorial sea.[16] The United States viewed the innocent passage regime as created by the 1958 Geneva Convention inadequate to protect the transit passage rights of both commercial and war vessels.[17] Instead, the United States offered the transit passage regime as a compromise between the regime of innocent passage, as applied in the territorial sea, and the regime of free passage as applied in the high seas.

After many years of debate the transit passage regime as provided by Part III of UNCLOS was accepted. According to Article 37 the strait State has a duty to assure freedom of *unimpeded* transit passage of all vessels and aircraft engaged in *continuous and expeditious transit of the strait between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone.* In return Article 42 gives the strait States the right to adopt laws and regulations relating to transit passage through straits, in respect of all or any of the following:

> (a) the safety of navigation and the regulation of maritime traffic, as provided in article 41;[18]
> (b) the prevention, reduction and control of pollution, by giving effect to *applicable international regulations* regarding the discharge of oil, oily wastes and other noxious substances in the strait;
> (c) with respect to fishing vessels, the prevention of fishing, including the stowage of fishing gear;
> (d) the loading or unloading of any commodity, currency or person in contravention of the customs, fiscal, immigration or sanitary laws and regulations of States bordering straits.

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[15] This condition was a result of the dispute over Israel's access to the Gulf of Aquaba through the Straits of Tiran. R.P. Anand. Origin and Development of the Law of the Sea (Martinus Nijhoff 1983) p. 182.

[16] For an interesting analysis of the US view of the expansion of the territorial Sea see, LT. Cmmdr K.D. Lawrence, Military-Legal Considerations in the Extension of Territorial Seas, 29 Military law review 47 ((1965) Vol 29

[17](1971 sessions of the Committee on the Peaceful Uses of the Sea Bed and Ocean Floor Beyond the Limits of National Jurisdiction , para.128.

[18] Article 41 allows the Strait state to establish traffic separation schemes, however, only after submitting a proposal to the "competent organization".

Foreign vessels are placed under a duty to comply with such laws and regulations.[19] Strait States may also establish a traffic separation scheme as authorised by the competent international organisation (IMO). Nevertheless, despite the appearance of a regulatory mechanism over vessel passage for the strait State subject to the transit passage regime—the reality is that transit passage gives the strait State virtually no enforcement powers—no bite.[20] The coastal State must rely entirely on the hope that the flag State will take the necessary measures both before passage (assuring compliance with international standards etc.) and after (imposing sanctions upon complaint by the strait State of a violation of a regulations).

The cost of being a strait

The question for the purpose of this paper is not a critique of the transit passage regime, but rather an inquiry into what is becoming an increasingly lopsided balance of the costs and benefits between the maritime industry and the strait State. The cost of maintaining safe and clean navigational waters necessarily increases with the rise in maritime traffic and accidents. Modern traffic management is expensive and has come to rely more and more on satellites, radar and computer driven systems—all of which require expensive capital investments

The Straits of Malacca and Singapore are an example of the high costs associated with providing safe navigation –costs which can be directly attributed to an increase in the number of oil tankers in particular and in maritime transport in general. Between 1978 and 1994 the Malacca Straits suffered a total of 476 accidents including oil spills. The number of oil tankers transiting the Straits quadrupled between 1979 and 1997.[21] Between 1975 and 1995 there were 54 reported oil spills in the Malacca Straits. This increase has resulted in more waste, more spills and consequently more environmental damage not to mention more accidents. And the coastal States (Malaysia, Singapore and Indonesia) have had to provide for more navigational aides, including the establishment of a multi-million dollar VTS system. The VTIS installed by Singapore was at a cost of S$40 million with annual expenses of S$1.5.[22] In order to address the ever-increasing demands on

[19] Article 37, Para (3)

[20] An example of how some transit passage straits have attempted to reduce the effects of the limitations of the transit regime is the common interpretation stipulation entered into by the States bordering the Malaccan Straits according to which they agree that a vessel violating the underkeel clearance restrictions established by the IMO Resolution A.375(X) can be denied passage or passage can be hampered without be viewed as a violation of the transit passage provision of UNCLOS.

[21] see TED Case Studies Malacca: The Impact of Transportation on Wildlife in the Malacca Straits, http://www.american.edu/projects/mandala/TED/malacca.htm

[22] Nandan, S.N., *The Management of Straits Used for International Navigation: International Cooperation in Malacca and Singapore Straits at p. 30*

the Straits of Malacca a Straits Council was established. Japan, as a major user of the Straits was also included on the Council. In addition, the three coastal States (Malaysia, Singapore, Indonesia) and Japan established a revolving fund to combat oil pollution in 1981 for the Straits of Malacca and Singapore.

Perhaps, it is not surprising that the first traffic separation scheme was established in 1968 in the Strait of Dover, immediately after the *Torrey Canyon* accident in 1967, the first major oil spill.[23] As a result of a series of fatal maritime accidents, including oil spills, in 1971 the traffic separation scheme was made mandatory and, in 1972 a radar was installed near Dover to survey traffic with broadcast done on Channel 10 VHF. The French followed shortly afterwards with a similar radar system established near Port Gris.[24] These measures were effective in reducing casualties but were also expensive. Today, a modern VTS system provides an important safety mechanism in the Dover Strait, but at substantial costs.[25]

The increase of traffic through the Turkish Straits has also placed pressure on Turkey to take additional measures, ranging from enacting new maritime regulations,[26] new routeing measures to installing a multi-million dollar VTS.[27] Although Turkey is a lucky strait as under the 1936 Montreux Convention Turkey can levy charges and taxes[28], these charges are only to meet the costs of the service for which the charge or tax is levied.[29] There is no additional charge which can be levied for pollution prevention measures, hydraulic surveys, VTS etc.

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[23] For a history of the traffic separation scheme see L. Cuvyers, *The Strait of Dover* (Martinus Nijhoff 1986) pp. 68-70.

[24] *Ibid*. at 71-72. British system called the Channel Navigation Information Service (CNIS) and the French system called the Service d'Information et de Surveillance de la Navigation en Manche (SINM).

[25] The budget of the Dover Coast Guard is part of the overall budget of the Ministry for Transportation. The VTS cost is included in the Department of Transportation budget.

[26] The Turkish Maritime Regulations for the Turkish Straits were first adopted in 1994 and later modified in 1998.

[27] Lockheed Martin was awarded the contract for the VTS for US$20 million. This figure does not include yearly operational costs. The VTS is expected to be operational by June 2001.

[28] For an interesting analysis of the comparative regimes of Straits concerning charging fees see Scovazzi, T. *Forms of Cooperation Between Bordering and User States: A Comparative Study of Straits Regime* (1995) , Paper presented at the Work Shop on the Straits of Malacca, 24-25 January 1995 in Kuala Lumpur.

[29] Under Annex I of the 1936 Montreux Convention Turkey can levy a tax or charge on each ton of net register tonnage in the following amount of *Francs gold: (a) 0.075 for Sanitary Control Stations (b) 0.42 for lighthouses, light and channel buoys up to 800 tons and 0.21 above 800 tons (c) 0.10 for life saving services, including lifeboats, rocket stations, light buoys or other similar installations.*

Article 43 of UNCLOS

During the years of debate over the Law of the Sea Convention many strait States, in particular Malaysia, Singapore, the Philippines and Spain voiced concerns over how the proposed transit passage regime would affect their ability to control for pollution, accidents, and particularly the dangers created by tankers. Various proposals were introduced to address these concerns.

At the 1973 session of the Seabed Committee set of draft articles were jointly introduced by Cyprus, Greece, Indonesia, Malaysia, Moroccco, Philippines, Spain and Yemen (*Eight State proposal*) which proposed the application of the regime of innocent pasage in straits used for international navigation. The draft articles were made taking into account considerations such as that the regulation of navigation was *to "establish a satisfactory balance between the particular interests of coastal States and the general interests of international maritime navigation".* The draft stated that "the regulations should contribute both to the security of coastal States and the safety of international maritime navigation." Which could be "achieved by the reasonable and adequate exercise by the coastal Sate of its right to regulate navigation through its territorial sea…"But perhaps the most interesting aspect of the draft was a provision on adopting "appropriate rules to regulate navigation of certain ships with 'special characteristics'. This included Article 11 (3) which expressly recognized the right of the coastal State *to be compensated for "works undertaken to facilitate passage".*

The same draft included a section for ships with *special characteristics* such as nuclear-powered ships or carrying nuclear weapons, ships carrying nuclear substances or any other material which may endanger the coastal State or pollute seriously the marine environment and ships engaged in research of the marine environment. According to article 15—the coastal State "may require prior notification, proof of insurance or a *guarantee certificate to cover for damages and use of designated sea lanes."*

At the second 1973 session, Ecuador, Panama and Peru introduced a set of draft articles which included a section entitled "*Special rules applicable to straits used for international navigation*". Article 40 of this section of "special rules" laid out the general principle of international law prohibiting the levying of charges or tolls. But in paragraph (2), straits narrower than 24 miles which " (a) require dredging, the *installation and maintenance of aids to navigation or the adoption of* other measures to maintain or facilitate safe pasage, or (b) when passage of certain types or classes of vessels, in the event of accident, economic activities or to the marine environment in the area, *the coastal State or States may request the international ocean space institutions to establish an equitable charge payable without discrimination by all vessels or by all vessels of the releveant class or type…using the strait.*

Paragraph (3) foresaw that the funds would be collected by the coastal state and paid into a fund administered by the international ocean space institutions which woud be used to maintain and facilitate safe passage and to compensate the coastal

state for any injury or damage resulting from the passage of a foreign vessel. The charge would be determined by a special convention.

Another proposal introduced at the 1976 Fourth session included a provision which would have created State responsibililty for any loss or damage resulting from the passsage of vessel. But this apparently garnered little support. [30]

When the transit passage regime was finally accepted the issue of compensation for the Strait State was reflected in the vague wording of Article 43 , which provide:

User States and States bordering a strait should by agreement cooperate:

(a) in the establishment and maintenance in a strait of necessary navigational and safety aids or other improvements in aid of international navigation

The Article is clearly a compromise which created a loosely framed duty by *user States* to co-operate with *strait States*. However, upon analysis this provision has many short comings. For example, the duty is on "user States"—a term which could include many different parties. Should the term be restricted to users which are "flag States"? Or, could it also include the States of the shipowners? The two can often be quite different. Shipowners will register their ships with flags of convenience, States not always having a high incentive to contribute or cooperate given the lack of any real link between the flag and the vessel. There is the question of Charterers? They can also be considered as "users" and thus the State to which they are attached could be also duty-bound under article 43. Even the cargo interest could also be considered as "users". Should the term "user States" be exclusive or an open-ended category? Who must ultimately bear the responsibility of "cooperating" under Article 43?

There are the practical considerations as well. If there is a duty to cooperate to enter into an agreement—it would appear that the Strait state would have to enter into a myriad of separate agreements—introducing a whole new level of bureaucracy which would itself entail additional costs. Such agreements could be regional, but regional users are not always the major users. Another issue which has been raised is that of "enforcement" of Article 43. The Convention is silent on this matter. The commentary to UNCLOS suggests that as there is no duty by strait States to provide for navigational aides these States could refuse to provide such navigational aides to user States.[31] However, as Van Dyke points out if "necessary navigational and safety aids are neither paid nor provided, the risk of maritime casualties in Straits will increase, with serious threats to human life and the

[30] Reports of the United States Delegation to the Third United Nations Conference on the Law of the Sea (ED. M.H. Nordquist and C. Park) Occ. Paper 33.

[31] (NANDAN, ROSENNE & GRANDY, United Nations Convention on the Law of the Sea 1982-A Commentary, II, Dordecht, 1993, p. 383.

environment" noting also the UNCLOS provisions (art. 192) creating a duty for States to protect and preserve the marine environment.[32]

Possible Solutions?

In 1997 the UK introduced an information paper to the Maritime Safety Committee at the IMO entitled "*Developing principles for charging users the cost of maritime infrastructure"* The paper received a "cautious" reaction, and some MSC members thought it raised legal issues. The UK informed the Legal Committee that it would consider the legal complexities carefully before bringing something back to IMO. The last sentence in the document states that "The United Kingdom is, therefore, developing its proposal further, taking into account the comments made by MSC delegates, and intends to seek advice from a future session of the Legal Committee."[33] However, the UK has not, to date submitted anything further on this issue to the Legal Committee.

In 1995 an interesting conference was held on the Strait of Malacca where the financial burdens of the Straits of Malacca was discussed together with possible alternatives, such as user fees. Some of the suggestions included funding at the global level, however, this option in practice has many short-comings. Another possibility would involve using funds already in existence, such as the IPOC fund. However, the IPOC fund is a reactive fund activated by an oil spill. Whereas, the function of a user fee would be to provide funding for the establishment and operation of aides to navigation and other instruments used for promoting safe navigation in straits.

The suggestion of IMO involvement has also been raised and does deserve further investigation. According to this suggestion an agreement would be made under the auspices of the IMO. The agreement would first be on a voluntary basis where user States would make contributions to a trust fund. Only if that proved unsuccessful a binding multilateral agreement could be considered.[34]

Industry-based agreements could also be considered. The oil industry is an obvious example, as they are clearly and easily identifiable group, and funding mechansims such as the IOPC have already created a precedent infrastructure. However, in all fairness, the oil indsutry is not the sole user of straits nor the sole threat. Nevertheless, oil transport does account for a significant amount of the volume and the dangers of maritime transportation.

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[32] Van Dyke, J. *Legal and Practical Problems Governing International Straits,* Paper presented at the Work Shop on the Straits of Malacca, 24-25 January 1995 in Kuala Lumpur. P. 35.

[33] LEG 76/INF.2 Sept. 12 1997.

[34] Nandan, *The Management of Straits Used for International Navigation: International Cooperation in Malacca and Singapore Straits Ibid. at p.35.*

CONCLUSION

Although the early proponents of a freer access to straits, such as Vattel, recognized the need for some user fees to cover the cost of maintaining safe straits, it would be unrealistic to expect the maritime community to-day to eagerly welcome the concept of user fees as a part of the exercise of passage rights through straits used in international navigation.[35] Nonetheless, so long as transportation of goods around the globe relies on the sea and oceans, straits will bear the burden with few of the benefits. An easy solution to finding a workable mechanism to share the financial costs of Straits will not be found—as clearly demonstrated by the history of UNCLOS. However, this should not mean that the issue be abandoned.

The issue of user fees can also be a sensitive subject for the strait State as well. Many strait States have been protective of the territorial nature of their strait. Care should be taken that any possible mechanism for creating a mechanism for financial participation should be purely financial.[36] The object of such a user fee would be only as compensation for the costs borne by the coastal state for passage of vessels. Naturally, the determination of how such costs would be measured must also be determined.

Although the Turkish Straits stands apart from many of the other Straits this should not should not preclude Turkey from investigating further the possibility of examining this issue with other strait States as the problems shared are common problems. I am not suggesting the creation of new UNCLOS strait States group, but I believe that strait States should form a dialogue and at the very least share their problems and seek possible solutions.

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[35] Neubauer R.D. and Shi J.S., *Establishing the Non-Seabed Provisions of the UNCLOS III Treaty as Customary International Law* (Oceans Policy Study Series) Nov. 1984 p. 19.

[36] Nandan notes that Indonesia and Malaysia have voiced their concern that any cooperation should not be viewed as a "means for internationalisation of the Straits of Malacca". Ibid. *The Management of Straits Used for International Navigation: International Cooperation in Malacca and Singapore Straits at p 34.*

PASSAGE REGIMES AND REGULATORY TRAFFIC MEASURES FOR OIL TANKER ACCESS TO ENCLOSED OR SEMI-ENCLOSED SEAS: CASPIAN SEA OIL AND THE TURKISH AND DANISH STRAITS

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INTRODUCTION

I have chosen to speak on this subject, because it is newly[1] and directly relevant to the growing energy security and supply problems of developed and certain newly-industrialising countries (NICs). In particular, the legal regime for tankers passing through the Turkish Straits is a major factor in efforts to bring Caspian Basin oil to US and EU markets, and the passage regime in the Danish Straits has potential relevance to this too. This paper concentrates, therefore, on those two straits. That both are of potential importance in securing for the West a new source of energy supply (and thus security) highlights the important of obtaining an appropriate balance between the international economic interests inherent in rights of passage through them[2] with the bordering States' interests in securing non-threatening, safe and environmentally sound transits.

The importance of other straits used for the international transportation of oil out of (as well as into) enclosed or semi-enclosed seas, notably the Strait of Hormuz, but also straits further 'downstream', such as Dover, Malacca and Gibraltar, goes without saying. What is, perhaps, distinct about the two straits I will

*The views expressed in this paper are personal, and do not represent those of the Azerbaijan International Operating Company or Shah Deniz Consortium, nor any of their shareholders.

[1] I do not, in this paper, deal with the origin of the inclusion , in Art. 16(4) 1958 Convention on the Territorial Sea and the Contiguous Zone (CTS), UKTS No. 3 (1965), Cmnd. 2511 (now Art. 45(b) 1982 UN Convention on the Law of the Sea (LOSC)), of straits used for international navigation between a part of the high seas and the territorial sea of a foreign State among the straits where ships enjoy the right of innocent passage. In other words, I do not discuss the question of rights of access to the Gulf of Aqaba (or comparable 'pluristatal bays') comprised wholly of the territorial waters of several States, but access to which (in the Gulf of Aqaba's case through the Strait of Tiran) is controlled by only two States. As to this, see Gross, 1959, and Lapidoth, 1969.

[2] If any illustration is needed of the fear that an energy shortage will have unacceptable adverse impacts on US economic interests it lies in President Bush's recent rejection of the Kyoto Protocol to the UN Framework Convention on Climate Change.

discuss, is that: in practice[3] (though not always in law) a single State bordering them is in a position to control access by large vessels between an enclosed sea and more open sea beyond; it is generally accepted that passage through them is regulated in part (or, in the Turkish case, possibly in whole) by long-standing international conventions[4] (within the meaning of Article 35(c) LOSC); and that both bordering States, not being Parties to the LOSC, regard the resulting legal regime of passage through the straits to be based on a mixture of convention, custom, acquiescence[5] and territorial sovereignty.[6] The emphasis on sovereignty notwithstanding,[7]

[3] The Turkish Straits (together, perhaps, with the Strait of Gibraltar) appear to be unique in being the sole means of access to and from the relevant seas. The Danish Straits are different in that they constitute three separate geographical straits (from west to east, the Little Belt, Great Belt and Sound respectively) and that Sweden also borders on the latter. On the other hand, deep draught vessels are effectively restricted to the East Channel of the Great Belt, which has a dredged depth up to 17m, compared to the Sound's Drogden Channel dredged depth of 7.7m east of Saltholm: see Denmark's Written Observations relating to the Request for Indication of Provisional Measures, *Passage Through the Great Belt*, Finland v. Denmark, ICJ, June 1991, pp. 11-12 and map I. Denmark takes the view that it is entitled to close (or restrict access to) one of the shipping channels within a single strait as long as an equally or more convenient channel was left in it for each transiting ship.

[4] Convention regarding the Regime of the Straits, done at Montreux 20 July 1936: 173 LNTS 213; Treaty for the Redemption of the Sound Dues, done at Copenhagen 14 March 1857, 47 BFSP 24 (1857 Treaty), and US-Danish Convention for the Discontinuance of the Sound Dues, done at Copenhagen 11 April 1857, 11 STAT. 719, T.S. 67 (1857 Convention).

[5] Indeed, '[I]t is doubtful whether, apart from acquiescence and special agreements on access and other issues, the [virtually land-locked] Baltic and Black Seas would have the status of open seas'; 'much turns on the maintenance of freedom of transit through the straits communicating with other large bodies of sea': Brownlie, 1998, p. 230. See also *O'Connell*, i, 1984, p. 324.

[6] In addition, both are arguable examples of 'multiple (or composite) straits', where several longitudinally connected straits should be considered as a legal whole. Certainly, the Turkish Straits have always been treated as a legal whole, regardless of the fact that they consist in two narrow straits connecting open seas (but see n. 5 *supra*) with the Sea of Marmara, claimed by Turkey as internal waters. The Danish Straits *stricto sensu* are, on the other hand, subject to a different legal regime to the other seas and straits forming the link between the North Sea/Skagerrak and the Southern Baltic Sea, and so cannot be seen as a 'multiple (or composite) strait'. It is true that Denmark has developed and maintained since the 1960s a dredged 'T Route' for deep draught vessels passing down the Kattegat and Samsö Belt into the East Channel of the Great Belt and through the Fehmarn Belt into the Southern Baltic Sea. Sweden, Denmark and Germany have, in addition, desisted from claiming their full (12 NM) entitlement to territorial sea in parts of the Kattegat as

Denmark has placed a greater emphasis on multilateralism in its claims to territorial waters and adoption and enforcement of traffic regulations in the straits aimed at safety and environmental protection than has Turkey. In doing so, Denmark has taken advantage of the fact that it is in the area of navigational or 'traffic' regulations (as opposed to standards concerning ships' pollution discharge and emissions, construction, equipment, design, manning and operation) that States have been most willing in recent years to envisage special rules for special situations, notwithstanding the general principle that standards for a global industry, shipping, should be global.[8] There might be lessons in this for Turkey.

ENERGY SUPPLY AND SECURITY PROBLEMS: THE IMPORTANCE OF CASPIAN BASIN OIL

Despite growing political commitment by developed State governments to renewable sources of energy, in the short-to-medium term fossil fuels will continue to dominate energy markets. The EU's reliance on imported energy sources, at present around 50%, will increase and so, given the relatively few sources of supply,[9] exacerbate its energy security concerns. Bearing in mind that North Sea reserves will be depleted by 2025 at present extraction rates, the EC Commission projects a 90% dependency on third States for oil by 2020.[10] US dependency on energy imports, especially oil, though less marked, will also grow. Japan's dependency is notorious.

In developing countries too demand will grow. In Asian newly-industrialising countries (NICs) alone, the demand for oil is expected to grow by 10 million bbl/d over the next 10-15 years,[11] compared to only about 1 million barrels per day (bbl/d)

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well as these straits, so as to leave a strip of Exclusive Economic Zone (EEZ) along their whole length. This does not wholly coincide with the T Route, which enters the Danish territorial sea in part of the Great Belt, but Denmark considers there to be an equally convenient route through its EEZ in that area for ships wishing to avoid entering its waters: Oude Elferink, 2000, p. 5. Outside the Danish Straits proper, therefore, foreign ships may continue to enjoy the freedom of navigation in passing between the Baltic and North Seas. In the Straits proper, the position is less clear (see *ibid.* generally, and *infra*), but it can at least be said that, whether the passage rights enjoyed are akin to freedom of navigation or transit passage (the US position) or innocent passage (the Danish position), the effect of the 1857 treaties is to distinguish them from those enjoyed elsewhere along the T Route.

[7] See *ibid.*, p. 8 *et seq.*

[8] See Plant, 1997.

[9] 70% of imported gas comes from Algeria and Russia and most imported oil from the Gulf region.

[10] 70% for gas: CEC, *Overview of Energy Policy and Actions*, COM (97) 167 final, Introduction, para. A.1.

[11] US Environmental Information Agency (EIA) web-site: http://www.eia.doe.gov.

in Europe.[12] Some rapidly growing economies, such as Turkey's (before the terrible earthquake and recent economic crisis) and India's, have been encountering energy shortages which act as impediments to faster rates of growth.

All these countries' energy needs and energy security can only be achieved by ensuring a variety of sources of supply. In the case of oil, the Gulf is likely to continue to be predominant, but the emergence, following the break-up of the USSR, of the newly independent States of the Caspian Basin, Azerbaijan, Kazakhstan and Turkmenistan (the 'NISs'), has presented energy-importing countries with an opportunity to develop an alternative regional source of supply. Proven oil reserves in the Caspian Basin, as of June 2000, were18-35 billion barrels (bbl) (2.47-4.81 billion tons) and possible reserves an additional 235 bbl (32.32 billion tons).[13] These, and its gas reserves,[14] make it the rough equivalent, in energy terms, of a North Sea.

Major Caspian Basin oil and gas exports would constitute 'alternative' sources both in an 'upstream' and a 'downstream' sense: that they come from new States;[15] and that new routes of supply can be developed that break the exclusive control of transit routes formerly enjoyed by Russia, and the potential for such control by Iran.[16]

UPSTREAM DEVELOPMENTS

A large number of joint ventures, production sharing agreements and exploration/field concessions have been agreed between the NIS governments and

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[12] *Ibid.*

[13] *Ibid.*, at web-page /emeu/cabs/caspgrph.html.

[14] Proven gas reserves were 236-337 trillion cubic feet (Tcf) (6.68- 9.54 trillion cubic meters (Tcm)), with possible additional reserves of 328 Tcf (9.28 Tcm): i*bid.*

[15] Some exploitation of Caspian Basin resources occurred in Soviet times, and oil and gas was exported from the region via the Russian system of pipelines, including the major Atyrau-Samara crude oil pipeline between Kazakhstan and Russia. But under-investment and technological limitations meant the region was under-explored and exploited, particularly offshore, and much of the infrastructure fell into disrepair. The already limited Caspian Basin production rates fell still further after 1991: see US EIA web-site.

[16] As late as 1997, the only export pipelines available to the NISs were those feeding into the Russian system. Today, non-Russian export options are limited to: (i) the minor Korpedshe-Kurt Kui gas pipeline between Turkmenistan and Iran, opened late in 1997; (ii) a minor pipeline from Baku, Azerbaijan, to the Georgian Black Sea port of Supsa, opened in April 1999 to take limited amounts of ACG 'early' oil; and (iii) limited Iranian oil swap arrangements, whereby Kazakhstan and Turkmenistan supply northern Iran with Caspian Basin oil in exchange for the facility to export the equivalent amount from a southern Iranian port. The additional routes nearest to completion all involve Russia or Iran too: see, e.g. *infra* n. 21.

foreign oil companies operating 'upstream'. Two consortia stood out until recently, as the largest to date and the only ones already producing oil: the TengizChevrOil joint venture between Chevron, the Kazakh Government and (later) Mobil, to develop the large Tengiz oil field on the NE Caspian Sea coast of Kazakhstan, over the next 40 years; and the Azerbaijan International Operating Company (AIOC), formed between the State Oil Company of Azerbaijan (SOCAR) and eleven foreign oil companies led by BP Amoco,[17] to develop the Azeri, Chirag and Deep-water Guinashli (ACG) offshore oil fields, over the next 30 years. On 14 March 2001, the Offshore Kashagan International Operating Company (OKIOC), a consortium of 9 oil companies[18] formed to develop the Kazakh East Kashagan offshore oil field over at least 14 years, commencing in 2005, confirmed that that field too 'is a truly major oil discovery',[19] thus greatly enhancing the prospects that major oil flows from the region will indeed take place.

In respect of 'upstream' development, there remain two key, and related, legal matters to be resolved: the legal status of the Caspian Sea and the territorial and/or development rights therein of each of the five littoral States, i.e. the 3 NISs, Iran and Russia. Attempts at seeking a resolution have been a moving feast, with little adherence to principle. Littoral State positions have, moreover, been influenced not only by the consequences of different legal solutions for their own offshore prospects and claims but also by competition between them to gain economic and political advantages connected with the second issue to be resolved, the development of 'downstream' trans-national export routes to take oil and gas from the landlocked Caspian Sea region to world markets.

DOWNSTREAM DEVELOPMENTS

Many leading energy companies, as well as construction and engineering enterprises, are involved in developing 'downstream' pipeline and related export infrastructure. Unlike in the case of gas, it is generally more cost-effective to build

[17] In order of equity shares held at 26 Feb. 1999, these were: BP Amoco, the operating partner (34.1367%); Unocal (10.0489%); Lukoil (10%); Statoil (8.5633%); Exxon, now ExxonMobil (8.0006%); Turkish Petroleum (6.75%); Pennzoil (4.8175%); Itochu (3.9205%); Ramco (2.0825%); and Delta (1.68%): 'Azeri Oil Group sees no Pipeline Choice before Summer': *Reuters*.

[18] The original parties, Agip (now the project operator), British Gas, BP (now BP Amoco)-Statoil, Mobil (now ExxonMobil), Shell, Total (now TotalFinaElf) and the publicly owned company, Kazakhstancaspishelf (KCS) each held a share of 14.29% or 14.3%: ENI web-site at http://www.eni.it /english/notizie/riviste/ec597_4.html. Statoil and BP Amoco are likely to sell their shares (4.76% and 9.52% respectively) to TotalFinaElf.

[19] OKIOC official cited by P. Goble, 'Second Well Comes in Kazakhstan Field', RFE/RL NEWSLINE Vol. 5, Part I, 15 March 2001, published on-line at http://www.rferl.org/newsline.

oil pipelines to tanker terminals and on-ship oil to the importing State by sea than to build them direct to major markets. Tanker navigation rights will, therefore, form an integral part of viable downstream solutions.

It is in the interests of both importing and exporting governments that the routes chosen be adequate, varied, and as secure and cost-efficient as possible, given regional political insecurity. In particular, EU and US security of supply would hardly be assured if either Russia or Iran were, by using their existing energy resources and infrastructures and political or economic pressure upon the NISs, to dominate the main export routes. Both the USA and the EC have consistently supported a multiple pipeline option since November 1997, when the USA signalled that it would no longer keep silence out of fear of offending Russia.[20]

The pipelines in question include two existing small oil pipelines connecting with Black Sea ports.[21] In addition, the USA and EC support (as well as a main gas export pipeline[22]) two main oil export pipelines (MEPs): (i) the Russian-led Caspian Pipeline Consortium (CPC) pipeline, now completed and due to come on-line in June 2001, connecting an existing line from the Tengiz field around the north shore of the Caspian Sea to the Russian Black Sea port of Novorossiysk;[23] and (ii) a BP Amoco-led pipeline from Baku, via Georgia to the Turkish Mediterranean port of Ceyhan.[24] This is projected to be completed, subject to feasibility studies,

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[20] See *infra*. This coincided with the beginning of production of ACG oil and Russia's severe economic downturn.

[21] Baku-Novorossiysk and Baku-Supsa.

[22] A trans-Caspian gas pipeline to link Turkmenistan with Turkey, via Azerbaijan and Georgia.

[23] See Consortium web-site: http://www.cpcpipeline.com. Equity interest in the CPC is allocated as follows*:* Russia (24%); Kazakhstan (19%); Oman (7%); Chevron (15%), LUKARCO (12.5%); Rosneft-Shell (7.5%); Mobil (7.5%); Agip (2%); British Gas (2%); Kazakhstan Pipeline Ventures (1.75%); and Oryx Caspian Pipeline (1.75%).

[24] Indeed, a Baku-Ceyhan MEP linking Azerbaijan, Georgia and Turkey is seen by those countries as instrumental in realising Zbigniew Brzezinski's idea of creating a 'geopolitical belt' around Russia, by establishing Azerbaijan, Georgia and Turkey as a bridge forming the backbone of a Eurasian corridor linking Eastern Europe with Central Asia (and, on a global scale, Western Europe with the Pacific basin). This is, perhaps, best interpreted, in the energy context, as a desire to allow Russia (and Iran) a fair share in the benefits of Caspian Basin development but to avoid the evil of their dominating control of those resources and their export routes: see Brzezinski's testimony before the Sub-committee on International Economic Policy, Export and Trade Promotion, Senate Foreign Relations Committee, Hearings, 105 Cong., 2nd Session, 8 July 1998 (see also 3 March 1999). The Energy Charter of 1990 and the 1994 Energy Charter Treaty (ECT) are the pre-eminent policy instruments by which the States concerned hope to ensure development of the energy resources of the former USSR (including Russia) and of exports to the West.

financing (a major problem is that it is longer and more expensive to build than the alternative pipelines) [25] and adequate volumes of oil to transport, by 2004, preferably with a trans-Caspian extension to Aktrau in Kazakhstan.

Potential pipeline transit States have obvious economic and political interests in attracting pipelines to cross their territories. Turkey in particular favours Baku-Ceyhan, as this would ensure for it the majority of the transit fee and taxation income, lead to improved development prospects in its poorer Eastern regions, including at its underused oil terminal at Ceyhan, strengthen the NATO commitment to Turkey and deliver the political and economic benefits of having Caspian Basin neighbours less economically tied to Russia.[26]

The 'downstream' export routes issue is intimately connected with several legal issues,[27] the most important of which are: US sanctions against Iran, which have to date prevented use of the shortest and most economical 'Southern' main export route;[28] and rights of passage through the Turkish Straits of oil tankers

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This is supplemented by other arrangements, such as the EC's INOGATE programme, dating from 1995, to develop a 'trans-Caucasian strategic energy corridor'. The ECT Secretariat is at present working on a Transit Protocol to the ECT and draft model inter-governmental framework and host country agreements, to assist in the process of negotiating workable east-west pipeline regimes.

[25] Despite their strong political support for it, the US and EU Administrations are not prepared to give it direct *subsidies*. The most they are prepared to do financially is to grant commercially viable projects (in the US case unlimited) trade support and sovereign risk feasibility study grants, loans, guarantees and insurance. This is so even though that pipeline might not be commercially viable, unless it receives some Kazakh and/or Turkmen (or even Russian) oil, in addition to ACG oil, even though the prospect has recently arisen that it will also take Chevron's Azeri Apsheron Field oil.

[26] Georgia, which is pro-Western and politically close to Turkey, appears content that Baku-Supsa should play a supplementary role to Baku-Ceyhan, gaining much needed income from both.

[27] As well as manifold political issues.

[28] This would probably involve 'oil swaps' of the sort referred to in n. 16 above. The USA has maintained a sanctions policy against Iran since 1979. In 1995, President Clinton signed the first of a series of executive orders prohibiting US companies and their foreign subsidiaries from conducting business with Iran and banning any 'contract for the financing of the development of petroleum resources located in Iran'. In addition, the State Department has opposed large-scale oil swaps with Iran by US companies. This has caused US oil companies to avoid dealings with Iran.
The US Iran-Libya Sanctions Act (ILSA) of 1996 imposes, moreover, mandatory and discretionary sanctions, for a minimum of two years, on non-US companies investing more than $40 million annually in the Iranian oil and gas sectors. The maximum investment allowable dropped to $20 million one year after enactment for countries not undertaking measures to inhibit Iran's actions in supporting

destined for European or US markets and loaded with Caspian Basin oil at a Black Sea port (via pipelines using the 'Northern' route to Novorossiysk, Russia, or the 'Western' route to Supsa, Georgia), as well as the equivalent rights through the Danish Straits for tankers loaded with such oil at Baltic ports[29] and destined for Western Europe or the USA.

THE TURKISH AND DANISH STRAITS PASSAGE REGIMES

Turkey has genuine safety and environmental protection interests in the Straits. Indeed, Turkey had been reviewing traffic management in the Straits for some time,[30] and had submitted an information paper on its proposals for action to the IMO,[31] before any connection between Straits tanker passages and Turkey's efforts to secure a Baku-Ceyhan MEP arose.[32] Turkey's resolve to improve the regulation of safety and environmental protection was, in addition, manifestly stiffened by the particularly serious collision involving the tanker, *Nassia,* in the Bosporus, in March 1994.[33] Turkey's geographical position as the sole riparian astride the Turkish Straits

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international terrorism and its pursuit of weapons of mass destruction. A number of countries have opposed the extra-territorial application of this legislation, but have been awaiting the expiry (and, at present, probable non-renewal) of ILSA, in August 2001, before investing in the Iranian energy sector. ILSA has not, however, prevented several non-US companies from dealing with that sector and, in practice to date ILSA requirements have always been waived.

The USA's Iranian sanctions policy is now under review, but radical change is unlikely to come soon. If the USA were to ease them significantly, the commercial viability of Baku-Ceyhan would be placed in serious doubt, when compared to Southern route options. The USA and EU are unlikely to change their policy of not giving direct subsidies to more expensive pipelines avoiding Iran, such as Baku-Ceyhan.

US and UN sanctions against the Taliban regime that controls 90% of Afghanistan are also relevant to export routes from the Caspian Basin, as were the former US sanctions against Azerbaijan: see S. 907 Freedom Support Act 1992, as amended in 1998 and Silk Road Act 2000.

[29] Having been transported through the existing Russian pipeline system or, in future, via a proposed pipeline from Odessa to Brody and possibly to a Baltic port beyond.

[30] Oral and Aybay, 1998/99, p. 1; Oral, 2001, pp. 6-7.

[31] IMO doc. MSC 62/INF.10, 23 March 1993.

[32] The impulse to make the connection arose only with the collapse of an earlier agreement with Azerbaijan to export oil in volume via Ceyhan, following the June 1993 coup, alleged by some to have been master-minded by the Russian government, that replaced Azerbaijan's President Elchibey with the (then apparently more pro-Russian) Aliev.

[33] See Plant, 1996, n. 39.

has, on the other hand, given it a tempting source of leverage against Russia, and the AIOC, in the struggle to secure the ACG oil MEP. The Baku-Ceyhan route would not increase use of the Straits. A Baku-Novorossiysk (or Baku-Supsa) MEP, on the other hand, would lead to significant increases in crude oil volumes, and hence tanker traffic, passing through the Straits, in addition to that coming from Tengiz.[34] Turkey was thus tempted to, and did, manipulate the passage regime for tankers in the Straits, and related discussions in the IMO, as an important part of its 'carrot and stick' approach[35] to persuading a reluctant AIOC to commit itself to a Baku-Ceyhan MEP. This it finally succeeded in doing in October 1999. No such considerations apply to the Danish Straits, as their use for transporting Caspian Basin oil is contingent upon a 'by-pass' pipeline being built to the Baltic Sea.

Denmark too has genuine safety and environmental protection concerns for the Danish Straits.[36] The difference from Turkey is that it has not tried to deal with the matter unilaterally. It is true that both States have sought IMO adoption of routeing measures in appropriate parts of both Straits, but of the two Turkey alone has acted unilaterally in other respects. Most significantly, having set up a voluntary 'Great Belt Traffic VTS', in 1991, Denmark obtained IMO adoption of this,[37] as 'a mandatory ship reporting system',[38] before implementing it on a mandatory basis in both channels[39] of the Great Belt, in 1997.[40]

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[34] This would certainly be so unless an expensive 'by-pass' pipeline were to be built, e.g. between the Bulgarian port of Burgas and the Greek Aegean port of Alexandropolis, between Burgas and Durres in Albania, via Macedonia, or between Odessa and the Baltic Sea. None of these competing projects is far-progressed, and they need not be seen as major competition for Baku-Ceyhan itself at this stage.

[35] As to other aspects of this, see Plant, 2000, n. 20.

[36] Indeed, it has a duty, under Art. 2 1857 Copenhagen Treaty (and Art. II 1857 Convention) to ensure safety of navigation in the Straits and their approaches.

[37] By IMO Res. MSC.63(67), 3 Dec. 1996.

[38] Under Reg. V/8-I of the 1974 International Convention for the Safety of Life at Sea (SOLAS), as amended.

[39] It felt justified in earlier imposing it on a mandatory basis and without IMO approval in the West Channel only, in order to be able to stop ships incapable of passing under the bridge being constructed across the Belt from attempting to do so. This was justified on the ground referred to in the last sentence of n. 3 above.

[40]In addition, in 1987, it obtained IMO's recommendation that transiting ships should report in to its voluntary ship-reporting system, SHIPPOS, achieving a compliance rate much higher (90%, according to Denmark's Counter-Memorial in the *Great Belt* case: vol. I, p. 290) than Turkey's TÜBRAP, and observe certain safety practices, including those relating to observing a safe maximum draught: IMO Res. A.620(15), 19 Nov. 1987; Ships' Routeing, 7th ed., Part F.

When, moreover, the IMCO failed to act on the Baltic Sea coastal States' invitation, in Resolution 3 of the 1974 Conference on the Protection of the Marine Environment of the Baltic Sea Area (see Annex B to the Convention of that name:

Radio communications-based ship reporting systems help the coastal State responsible to be aware of the traffic present in its zone of operation, as an aid to search and rescue, pollution prevention-preparedness and assisting safe passage. In adopting a VTS as a ship reporting system, the IMO did not observe a nice distinction between the two, which have much in common. In essence, VTS adds to ship reporting systems higher degrees of sophistication in two-way information exchange (including, in some cases, giving advice, or even instructions, to vessels in the zone of operation), in monitoring and surveillance and in operator training. In principle, their prescription and implementation, and IMO's procedural role, are now governed by a separate provision, SOLAS Reg. V/8-2.

Turkey could have submitted (an improved) TÜBRAP for IMO approval as a mandatory ship reporting system at any time since the beginning of 1996, and can submit its new VTS system to the IMO for approval of as a mandatory ship reporting system or VTS without compromising its sovereignty in the Straits. I can see nothing in the text of SOLAS Reg. V/8-1[41] or V/8-2 that should prevent this. It is surely better to have the approval of the international community for the operation of mandatory reporting or VTS arrangements than to rely on national regulations, asserted on the basis of a dubious view of the scope of Turkish jurisdiction.

Indeed, as mentioned above, Turkey has already sought such international approval of a traffic regulation measure in the Straits, when it successfully submitted to the IMO for its adoption its proposal for a series of five traffic separation schemes (TSSs) to run the length of the Straits. TSSs are governed by Rule 10 of the 1972 International COLREGS and operate on the simple principle that dividing opposing streams of traffic into lanes separated by a separation line or zone reduces the more dangerous risk of traffic meeting head-on[42] at the expense of increasing the less dangerous overtaking rate.[43] Unfortunately, it also passed, in November 1993, new Maritime Traffic Regulations for the Turkish Straits and Marmara Region,[44] to come

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17 I.L.M. 546 (1974)), to adopt rules for deep draught vessels transiting the Great Belt that might include mandatory use of pilots and carriage of VHF radio and DECCA navigation equipment (IMO Res. A. 579(14), 20 Nov. 1985, and A.620(15), 19 Nov. 1987 merely recommend the use of pilots by certain ships or ships carrying certain cargoes, in the Sound and entrances tot he Baltic Sea respectively), Denmark did not impose these requirements unilaterally. Indeed, its imposing compulsory pilotage would be contrary to Art. 2 1857 Copenhagen Treaty (and Art. II 1857 Convention): *cf.* the Turkish Straits.

[41] Including sub-paras. (j) and (l), which require a mandatory reporting systems' consistency with the regimes of international straits and the law of the sea respectively.

[42] T. Wikborg demonstrated that meeting encounters were more dangerous than overtaking or crossing encounters, in 'Radar and Collisions at Sea', paper to the Royal Institute of Navigation, Nov. 1954.

[43] Crossing traffic presents greater difficulties: Plant, 1985, pp. 141-42.

[44] Turkish *Official Gazette*, No. 21815, 11 Jan. 1994; *LOSB*, No. 27 (1995) p. 62

into force on 1 July 1994, which purported to bind foreign transiting ships and were very restrictive.[45] The IMO adopted the TSSs together with a set of associated IMO Rules and Recommendations.[46] These were much less intrusive than the Turkish regulations and came into force on 24 November 1994.

A notable (and forever unique![47]) feature of the scheme in the narrow and winding Bosporus is that larger vessels are often unable to remain completely within the appropriate traffic lane, so that IMO Rule 1.2 requires these vessels to report this to the Turkish authorities, and Rule 1.3 authorises them to 'temporarily suspend two-way traffic and regulate one-way traffic to maintain a safe distance between vessels'. This has been done in respect of about 3.7% of passages, causing delays of about two hours for other transiting vessels.[48]

While accepting (Russia with reservations) the TSSs, Russia and the other Black Sea littoral States, together with Greece and Cyprus immediately, and thereafter consistently, opposed the new Turkish domestic regulations. They did so on political and technical, as well as legal, grounds.[49]

The Russian-led legal objections were that the regulations were inconsistent with international law, notably the 1936 Montreux Convention, and with the IMO Rules and Recommendations. In particular, the regulations threatened to greatly impede or restrict the passage of large oil tankers.

Whether or not the Turkish regulations were inconsistent with the Montreux Convention is an extremely complex question. My view is essentially[50] as follows. Although Turkey is not a Party to the 1982 LOSC, it is bound by Article 35(c) of that Convention, as it represents, like much of the LOSC, customary international law, to which Turkey is not a persistent objector. Denmark is similarly bound. That article provides: 'Nothing in [Part III, concerning 'Straits used for International Navigation] affects the legal regime in straits in which passage is regulated in whole or in part by long-standing international conventions in force specifically relating to such straits'.[51] The 1936 Montreux Convention is the paradigm of such a convention, and preserves an objective regime of 'freedom of passage and navigation'.

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[45] For passing analysis of the most important provisions, see Plant, 1996, pp. 19-25. In addition, Turkey submitted to the IMO, for an uncertain purpose, a set of draft preliminary associated rules for shipping reflecting its new domestic regulations: IMO doc. MSC 63/7/2, 26 Jan. 1994, Annex.

[46] The IMO Rules and Recommendations on Navigation through the Strait of Istanbul, Strait of Canakkale and the Marmara Sea, MSC 63/23, 3 June 1994.

[47] IMO, *Ships' Routeing,* 7th ed., (1999), Part A, para. 6.8 will preclude such a design, which does not guarantee the traffic separation aimed at, in future.

[48] See Plant, 2000, p. 205.

[49] See Plant, 1996, pp. 19-20, 22 and 25, and 2000, pp. 196, n. 25, and 203-208.

[50] For more thorough analyses, see Plant, 1996 and 2000.

[51] *Cf.* Art. 25 CTS.

This regime, although open to enjoyment by all States, does not compromise Turkey's sovereignty in the Straits, which is not at issue. The status of the various waters of the Straits, as either internal waters, territorial sea (or even high seas) [52] is a matter to be determined in accordance with international law, and the possession in the first two by Turkey of sovereignty, has no effect on the existence in those waters of international rights of passage. The fact that a strait connects open waters with internal waters, for example, is no more fatal to the existence of rights of passage than is the existence of internal waters within parts of a strait itself.[53] Turkey is entitled to exercise prescriptive and enforcement jurisdiction, including with respect to foreign transiting ships, but only if it does so consistently with those rights. Indeed, while it is no longer contested that the territorial sea is subject to coastal state sovereignty,[54] 'it is controversial whether a State has sovereignty over its territorial sea in the fullest sense. The point is met in [the CTS and LOSC][55] by provisions to the effect that sovereignty is exercised subject to the provisions of the Convention and "to other rules of international law".'[56] The one important qualification of coastal state sovereignty appears to be its duty not to hamper innocent passage, including in straits,[57] or, where applicable, transit passage. Both innocent and transit passage are, therefore, exceptions to sovereignty, as is the 'freedom of passage and navigation' enjoyed in the Straits; the only difference is their content.[58]

There can be no presumption that matters not expressly dealt with in the Montreux Convention fall to be determined by Turkey, let alone that Turkey was made into the sole arbiter of the Convention's interpretation, by virtue of its

[52] In the past, the Sea of Marmara was regarded by many jurists as open sea (see, e.g., *Oppenheim*, i, 1948, p. 252), but, since access to it became guaranteed for foreign ships under the Lausanne Treaty and Montreux Convention (and bearing in mind that access by aircraft would require Turkish consent to overflight of its territory in order to reach the Sea), the rationale that this characterisation was essential in order to guarantee a right of access, otherwise absent, to foreign States appears to have disappeared. *Cf. Oppenheim*, i, 1992, p. 632 (re pluristatal bays).

[53] C*f.* the Strait of Juan de Fuca, Beagle Channel and Jubal Strait: see Bing Bing Jia, 1998, pp. 17-19.

[54] *Oppenheim*, i, 1992, p. 600.

[55] Art. 1(2) CTS; Art. 2(3) LOSC.

[56] Fitzmaurice, 1959, p. 75, n. 10.

[57] *Cf.* Treves, 1991, p. 906. It seems, moreover, that the list of subjects-matter on which a coastal State is permitted by Art. 21(1) LOSC to prescribe laws and regulations 'relating to innocent passage' should be read as non-exhaustive, else a further, unwanted, constraint would be placed on coastal State sovereignty: O'Connell, I, 274; Treves, *ibid.*, p. 917 . There was no equivalent listing in Art. 17 CTS, and the French and Spanish texts, if not the English, are consistent with such an interpretation: Treves, *ibid.*

[58] *Cf.* Treves, *ibid.*, p. 950.

sovereignty or the transfer to it of the former functions of the International Commission established under the 1923 Lausanne Treaty of Peace.[59] The equivalent claim by Denmark (and Sweden) is that foreign warships and State aircraft, which never had to pay dues, and so can be presumed to be unaffected by the 1857 Copenhagen Treaties, are nevertheless subject to coastal State restrictions, because the 'long-standing international conventions' apply as 'modified' by long-standing domestic legislation.[60] This is inadmissible, on first principles, as it seeks to subject international law to domestic law. The USA rejects it.[61]

The question at issue is, therefore, what is the nature of the international passage rights enjoyed by foreign vessels transiting the Straits.

It is tolerably clear from the text, its context and the Convention's *travaux préparatoires* that the negotiators had in mind the enjoyment, by foreign ships in peacetime, of transit rights akin to the high seas freedom of navigation, rather than the more restricted right of innocent passage in the territorial sea.[62] Certain expressions appearing, *prima facie*, to be reservations to the contrary by the Turkish delegation at the 1936 Montreux Conference, [63] were in reality not intended to have this effect. They were contradicted by other Turkish statements,[64] and made in the context of a Turkish proposal to have its sovereignty in the Straits expressly set out in the Convention, **but without prejudice to the other terms of the Convention**.[65]

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[59] See further Plant, 2000, pp. 196-97.

[60] Alexandersson, 1982, pp. 82-86 and 89. This contradicts the Danish position taken in its 1929 response to the 1930 Codification Conference questionnaire, that the impact of the convention was to return the regime of the straits to normal customary international law rules: *Conference for the Codification of International Law, Bases of Discussion drawn up by the Preparatory Committee, Territorial Waters*, ii, doc. C.74, M.39 (1929), p. 13. It is not entirely clear, moreover, whether Danish national regulations can be avoided by staying outside its territorial waters while in transit: *cf.* Bangert, 1997, p. 107.

[61] Schacte and Bernhardt, 1993, pp. 546-47, expressing the official US position.

[62] See Plant, 2000, pp. 196-97 and 200-01.

[63] That 'le passage doit en tout cas être innocent et inoffensif' (Mr Aras, *Actes de la Conférence de Montreux, Compte Rendu des Séances Plénières et Proces-Verbal des Débats du Comité Technique*, 1936, Liège: H Vaillant-Carmenne, p. 32); 'on ne nous dise pas un jour que les navires peuvent naviguer dans les Détroits comme s'ils étaient en pleine mer' (Mr Menemencioglu, *ibid.* p. 109); and that Turkey asserted its 'autorité.. en ce qui concerne la police de la navigation'.

[64] Mr Aras stated, for example, that 'la Turquie a tenu à assurer une liberté complète de passage sous les formes les plus propices à la navigation commerciale universelle' (emphasis added): *ibid.*, p. 57.

[65] Mr Menemencioglu stated that 'la Turquie n'a pas l'intention de modifier unilatéralement un article quelconque de la convention' (*ibid.*, p. 214) and that it was claiming 'une compétence de police et d' une compétence judiciare qui n'affecte en rien les dispositions de la convention et qui reste en dehors d'elle': *ibid.*,

In any event, as a matter of treaty law, they are not determinative of the correct interpretation of the Convention.[66]

Emphasis on the 'principle of contemporaneity' in interpreting the Convention is, perhaps, more persuasive that the delegates did have innocent passage in mind, in 1936, as perhaps the then 'normal' rule governing passage through straits used for international navigation.[67] This is because, a few years earlier, the 1930 Hague Codification Conference, while failing to adopt a convention on the territorial sea, nevertheless 'reached some measure of agreement on such questions as the legal status of territorial waters, including the right of innocent passage'.[68] The fact remains, however, that a measure of uncertainty surrounded the customary international regime of innocent passage in 1936, both in general and more especially in straits used for international navigation. The fact also remains that the nature of the right of innocent passage in straits, especially very important straits forming the sole route between two important sea areas, has always been qualitatively different from that in territorial waters in general.[69] First, it may not be

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p. 109. Turkey clearly has police and judicial competence (additional to that to 'police' the Convention stipulations as to warships, sanitary controls and tariffs) arising out of self-defence and necessity, to which the exercise of international navigation rights is always subject. It can thus, for example, intervene to prevent pollution from a maritime casualty off its coast or prevent abuse by foreign vessels of rights of passage. This includes: arresting and prosecuting a vessel recklessly interfering with other vessels' passage; stopping and searching a ship reasonably suspected of carrying arms or drugs constituting a threat to Turkey (e.g. the three vessels suspected of carrying S-300 missile parts to the Republic of Cyprus, in 1997-98); and refusing a vessel clearance to transit the Straits when her size and condition would render this patently unsafe, as in the cases of the 315 metre long tanker, *Olympic Armour II*, in April 1994 (see Plant, 1996, p. 18), and a stripped-down and engineless ex-Soviet aircraft carrier, the *Varyag*, *en route* to China, allegedly for use as a floating casino and amusement park but possibly for military purposes (*Financial Times*, 8-9 Dec. 2000) or unless special arrangements are put in place, as in the case of a 288 metre bulk carrier's passage in August 2000: *Washington Post*, 15 Nov. 2000.

[66] Not being formal reservations to the treaty, the statements form only part of the *travaux préparatoires*, recourse to which as an interpretative aid is justified, under Art. 31 Vienna Convention on the Law of Treaties, only where primary rules of interpretation are not conclusive.

[67] See, e.g., Toluner, 1995, p. 30; Oral and Aybay, 1998/99, pp. 3-5.

[68] Report of Committee 2: AJ, 24 (30) Suppl, p. 234.

[69] *Cf.* now Churchill and Lowe, 1999, p. 112. It is interesting to note in this connection that Aybay and Oral moved from the argument, on the above-cited grounds, in their 1998 paper, that the Straits regime is one of innocent passage to the argument, in their 1998/99 paper, that its unique treaty regime in fact provides for a right not the same as but akin to the right of innocent passage.

suspended, as it can in the territorial sea more generally, by the coastal State for security reasons.[70] Second, the principle that the coastal State is not entitled to charge dues or tolls to vessels for merely transiting a strait appears to have been established earlier in straits than in the territorial sea in general, i.e. at latest by the time the freedom of the seas had become universally accepted by the early 19th Century.[71] 'Third, 'there can be no doubt that foreign warships enjoy[ed in 1936, and still enjoy, at the least] a right of innocent passage through [straits comprised entirely of territorial waters that] form a part of the highways for international traffic',[72] whereas the existence of an unconditioned right of warships to such passage through the territorial sea in general is left unclear by the CTS and LOSC, and remains controversial to this day.

An additional disadvantage of emphasis on the 'principle of contemporaneity' is that it works against a purposive approach to interpretation, that seeks to update an old treaty's terms to meet modern needs. It has not been taken up by the Turkish Government.

The Montreux Convention expressly subjected the 'freedom of passage and navigation' in the Straits to only two forms of 'formality' at the hands of Turkey: sanitary inspections and controls; and the right to levy fees at set rates in order to help pay for various safety-related services. Mandatory pilotage was expressly forbidden. The interpretation of such an old treaty in the light of modern needs sets a number of challenges, but the correct approach, consistent with Articles 30 and 31 of the Vienna Convention on the Law of Treaties, would appear to be not to place too much emphasis on a literal, a contextual or a purposive approach, but to achieve a common sense view of what the 'regime' is in practice; i.e. on what happens in practice, with the consent of the international community. It has thus been possible, by taking account of mutually developed practices, like the 10 knot speed limit and TSSs, in the light of technological developments, to 'update' and 'supplement' the ageing and limited provisions of the Montreux Convention concerning safety and even a concern of limited interest in 1936, environmental protection.[73] In addition, of course, generally accepted international standards ('GAIRAS' - i.e. global IMO and ILO standards) on ship safety and ship-source pollution, notably the COLREGS,

[70] Art. 16(4) CTS; Art. 45(2) LOSC.

[71] *Oppenheim*, 1992, i, p. 634; Denmark nevertheless insisted upon continued payment of the Sound Dues, which were abolished only by virtue of the 1857 Treaty. The USA insisted on a separate convention, differently named, to avoid any suggestion that Denmark had a right to levy tolls and thus an undesirable precedent in respect of other straits: Oude Elferink, 2000, p. 2, n. 3.

[72] *Ibid.*

[73] This does not permit Turkey to invoke the doctrine of *rebus sic stantibus* (changed circumstances) in order to effect 'up-to-date' interpretations of the Convention permitting it to impose its own wishes, since that doctrine, never successfully invoked in practice, is only a ground for treaty termination, not modification: ILC (1966) ii YILC, 256-58; Dyoulgerov, 1999, p. 93.

SOLAS, MARPOL, Load-Line and STCW Conventions, apply to the vast majority of transiting vessels by virtue of (besides certain LOSC provisions referred to below) near universal adherence to them and their geographical scope. In addition, States remain liable for damage caused by non-compliance by their warships and other governments ships used for non-commercial purposes with lawful coastal State laws and regulations[74] and for breach of their international obligations concerning the protection and preservation of the marine environment.[75] They must also ensure proper compensation in respect of pollution damage caused by natural or juridical persons under their jurisdiction (including their jurisdiction as a vessel's flag State).

There is, therefore, no lacuna in the Straits either of regulatory standards or the possibility of their enforcement or of State responsibility and liability. But those standards are globally agreed, not unilateral, standards, and enforcement is to be primarily by the flag, and not the coastal, State.

The 1994 Turkish regulations did not observe these arrangements. Equivalent Danish laws applicable in the Danish Straits and Denmark's enforcement practices do.[76]

If the Montreux Convention were regarded, as it is by the USA, as governing passage matters 'in whole', it would appear that Turkey had no legal basis for many of its 1994 regulations, as they clearly exceeded the scope of the two permitted 'formalities' interpreted in this common sense manner.

If, however, one takes my view that, at least as regards merchant ships, the Convention only governs passage 'in part', the further question arises of what governs 'residual' matters. The answer is, of course, customary international law, but is the customary regime in such a strait, apart from the operation of Article 35(c), transit passage or innocent passage? If the former, the bordering State has a very limited basis for prescribing safety and environmental protection laws and regulations and for enforcing them against foreign ships in transit. It is essentially tied to GAIRAS standards, plus additional traffic regulation measures specifically consented to by the IMO.[77] It may take at-sea enforcement measures only where there is a threat of or occurrence of major pollution.[78] If the latter, it has a broader, though not unlimited,[79] scope to prescribe and enforce at sea reasonable safety and environmental protection regulations governing foreign transiting ships. In my view,

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[74] Art. 31 LOSC.

[75] Art. 235(1) LOSC.

[76] Oude Elferink, 2000, p. 8, n. 30, and pp. 10-12.

[77] Molenaar, 1998, pp. 320-22; Roach, 1995, p. 241, n. 16; Oxman, 1995, p. 278.

[78] Art. 233 LOSC.

[79] In particular, coastal States must not hamper the right of innocent passage: see *supra* p. 4. In addition, coastal State regulations must not be discriminatory nor relate to ship construction, design, equipment or manning (or, it seems, the operation of foreign ships in innocent passage: *Oppenheim*, 1992, i, p. 617) unless they give effect to GAIRAS.

transit passage represents the customary international legal regime, at least in certain heavily used straits, such as the Turkish Straits.[80]

At the IMO, the consistent Turkish response to the Russian-led opposition to its 1994 regulations was to deny any inconsistencies between (and that the IMO was the appropriate forum in which to discuss, the conformity of) its domestic regulations with the IMO Rules and Recommendations and international law. It also pointed out, correctly, that the TSSs and associated IMO Rules and Recommendations could not be amended without its consent. In October 1994, however, the IMO Legal Committee noted that a substantial number of States agreed with Russia's objections and decided that the IMO was the appropriate body in which to discuss these issues. The IMO claimed, through its Secretariat and relevant Committee chairmen, that, as an essentially technical body, it should and would only be concerned with the technical safety and environmental protection aspects of the subject. Unfortunately, that was not entirely possible, as rights of navigation embody those important economic and political interests that, I have argued above, must be balanced with, *inter alia*, important coastal State safety and environmental interests. Determining the correct balance is a highly political process of global importance. If the IMO feels unwilling to act in this context, the UN Organisation itself should consider doing so.

Turkey's response to the Legal Committee's decision, was a *Note Verbale* in which it stated that it would continue to apply the regulations but that it had issued a set of Instructions to its relevant authorities on how they should implement them consistently with the IMO Rules and Recommendations and with international law. I examined the issues up to that point in an article that appeared in 20 *Marine Policy* (1996). In it I noted that the USA (Turkey's ally and a strong, albeit then publicly silent, supporter of a Baku-Ceyhan MEP) was satisfied that the Instructions resolved key inconsistencies for practical purposes. I concluded, nevertheless, that inconsistencies were still apparent, that it was undesirable on safety grounds for there to be several different, and conflicting, instruments and that, if Turkey's pledge to operate its regulations consistently with the IMO Rules and Recommendations were genuine, it should have had no objection to enacting formal amendments to its regulations.

No amendments being forthcoming at the time, a long and acrimonious debate persisted in the IMO,[81] until discussions were discontinued (to most delegations' relief, but against Russian and Black Sea State opposition) in May 1999. This centred upon possible amendments to the IMO Rules and Recommendations. Russia led allegations that: more suspensions of two-way traffic in the TSSs were taking place than had been foreseen when the IMO approved them and the associated Rules and Recommendations; that these 'frequent' suspensions were 'unacceptable for the [schemes'] safe and normal operation'; and that larger vessels, such as oil tankers, were being discriminated against in the process.

[80] *Cf.* Churchill and Lowe, 1999, p. 112.
[81] Described in Plant, 2000, pp. 203-08.

Advantage was taken, in 1997, of the first ever boycott of IMO business by a Member State, Turkey, over the Straits issue, to prepare a draft Navigation Sub-committee report recommending the replacement of TSS traffic lanes with 'precautionary areas' in those narrow parts of the Bosporus and Dardanelles where large vessels had difficulty staying within the traffic lanes. The implication would have been that a duty to proceed with caution and to observe COLREGS Rule 9 (the 'narrow channel' rule) would have applied instead of Rule 10. The significant difference would have been that vessels would only have had to keep over to the starboard side as far as possible instead of keeping within a traffic lane so that, given supervision of Rule 9's operation by the new VTS system being installed by Turkey, fewer suspensions of two-way traffic would be necessary. Turkey opposed the change on the ground that it was really a device to accommodate and accelerate the passage of large tankers. Turkey had much justification for its opposition; safety in the Straits has improved markedly since 1994, and upon deciding to drop further discussions in May 1999, the majority in the IMO recognised that the TSS system had been effective and that they could not be sure that any change would improve safety. Turkey was also justified in seeking to avoid any change until the impact of the new VTS system, due for completion at the end of 2000, could be seen.

In November 1997, however, Turkey faced the prospect of an IMO Assembly resolution recommending adopting Russia's suggested changes against its will. In the middle of that Assembly, however, a shift in US policy on Baku-Ceyhan saved the day. In the same month that ACG production started, Federico Peña's 12th November 1997 speech in favour of that MEP option meant Turkey could relax its position on the passage regime, given the inter-governmental understanding that, while ACG 'early' oil could pass via the Black Sea through the Straits, the main volumes should go through Ceyhan. With US support, Turkey managed to obtain IMO agreement to take no further action on the Navigation Sub-committee report. With IMO procedures on its side,[82] it was then able to ensure painfully slow progress on any new report, until the abandonment of further discussions. Meanwhile, it prepared amendments to its domestic regulations, which in general ensure closer (but, in my opinion, not complete)[83] conformity with both the Montreux Convention and the IMO Rules and Recommendations. These were adopted on 6 November 1998, [84] a mere week after the Ankara Declaration of Azerbaijan, Georgia, Kazakhstan, Turkey and Uzbekistan had declared their political support for a Baku-Ceyhan MEP.

[82] *Ibid.*, p. 209.
[83] *Ibid.*, pp. 201-02 and 210-12.
[84] 'Maritime Traffic Regulations for the Turkish Straits Region', Decree No. 98/1860, in English translation on the Turkish Maritime Pilots' Association's web-site, at http://www.turkishpilots.com.

THE FUTURE

It does not follow that Turkey is now prepared to permit unimpeded passage of all oil tankers. On the same day as adopting the amended passage regulations, it threatened the possibility of raising transit fees up to five-fold in order to make tanker transit prohibitively expensive.[85] In addition, the discontinuation of discussion in the IMO, on the basis that the safety debate appears to be exhausted for the present, left unanswered a number of Turkish assertions, [86] still being reiterated,[87] that it would regulate passage with predominant regard to its perception of its own safety and environmental protection interests, and would not permit the Straits to become an oil pipeline. This failure to take into account the economic and political interests underlying the navigation rights in question could only be resolved by action in the UN itself, but it appears unlikely that this will occur.

It does not follow from all of this that Turkey is a certain winner. Most oil experts would not give odds much better than even that Baku-Ceyhan will indeed be built, despite all of Turkey's efforts. If progress towards building a Baku-Ceyhan MEP falters, Turkey might once again be tempted to apply pressure by asserting greater control of Straits tanker passages.

Caution should be advised. A return by Turkey to a strong unilateralist stance over the Straits would, perhaps, merely fan increased Western government and oil company interest in seeking other export routes, including through a rapprochement with Iran. Turkey's previous stance established a poor precedent for international cooperation and caused a degree of irritation in international circles which should not be overstated[88] but was real; its unilateralism was in marked contrast to its multilateralism in 1936, which gained it much, and to Denmark's multilateralism in relation to the establishment of a mandatory VTS. In my opinion, it is time to realise that the sheer importance of the Straits means that States will not tolerate future unilateralism beyond certain bounds[89] and that multinational oil companies engaged in exporting Caspian Basin oil will in all events seek to use a variety of routes to avoid over-dependence on one. Submission of an application to the IMO for its adoption of the new Straits VTS system as a mandatory system would both gain Turkey great political credit at a time when US attitudes towards

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[85] Statement by Burhan Kara, Minister for Maritime Affairs: AP and ITAR-TASS, 6 Nov. 1998.

[86] See Plant, 2000, pp. 208-09.

[87] See, e.g., statement by Prof. Ramazan Mirzaoglu, Minister of State for Maritime Affairs at 'Accidents in the Straits and Safety of Marine Traffic', Turkish Chamber of Shipping Conference, 15 Feb. 2000, reported on the Turkish Maritime Pilots' Association web-site, at http://www.turkishpilots.com.

[88] Plant, 2000, pp. 208-10.

[89] Their more tolerant attitude towards unilaterally-imposed traffic regulations, by Chile, in the Strait of Magellan is probably the result of the lesser importance of those straits to international traffic.

Iran and Russia are being reappraised and place the solution of residual safety problems in the Straits on a sound legal basis.

REFERENCES

ALEXANDERSSON, G., 1982. The Baltic States. Martinus Nijhoff, The Hague/London/Boston.

AYBAY, G., ORAL, N., 1998. Turkey's Authority to Regulate Passage of Vessels through the Turkish Straits. 3(2) *Perceptions, Journal of International Affairs*, pp. 84-108.

BANGERT, K., 1997. Denmark and the Law of the Sea. In Treves T., Pineschi Laura (eds.), The Law of the Sea. The European Union and its Member States. Martinus Nijhoff, The Hague/London/Boston.

BING BING, J., 1998. The Regime of Straits in International Law. Clarendon Press, Oxford.

BROWNLIE, I., 1998. Principles of Public International Law. Oxford University Press, Oxford, 743p.

CHURCHILL, R., LOWE, A.V., 1999. The Law of the Sea. Manchester University Press, Manchester, 494p.

DYOULGEROV, M., 1999. Navigating the Bosporus and Dardanelles: A Test for the International Community, 14 *IJMCL* 57.

FITZMAURICE, Sir Gerald, 1959. 8 *ICLQ*.

GROSS, L., 1959. 53 *AJIL*, 564-94.

LAPIDOTH, R., 1969. 40 *RGDIP*, 30-51.

MOLENAAR, E., 1998. Coastal State Jurisdiction over Vessel Source Pollution, Martinus Nijhoff, The Hague/London/Boston, 638 p.

O'CONNELL, D.P., 1984. Shearer I. (ed.), The International Law of the Sea, vol. I, Clarendon Press, Oxford, 634p.

OPPENHEIM on International law, 1948, 7th ed., vol. I Law of Peace, Longmans, Harlow.

OPPENHEIM on International law, 1992, 9th ed., vol. I, Law of Peace, Longmans, Harlow.

ORAL, N., 2001. Oil and water: Caspian Oil and Transportation. Challenges Facing the Turkish Straits. Paper to Conference on Current Marine Environmental Issues and the International Tribunal for the Law of the Sea, Centre for Oceans Law and Policy, University of Virginia Law School, Hamburg, 16-19 March 2001.

ORAL, N., AYBAY, G., 1998/99. The Meaning of Freedom of Passage and Navigation under the 1936 Montreux Convention on the Regime of the Turkish Straits. *Turkish Review of Balkan Studies*, (4) 1-10.

OUDE ELFERINK, A., 2000. The Regime of Passage through the Danish Straits. On-line at: http://www.law.uu.nl/english/isep/framenilos.asp; also 15(4) *IJMCL*.

OXMAN, B., 1995. The Role of the IMO. Proceedings of the 29th Annual Law of the Sea Institute Conference, 225 *et seq.*

PLANT, G., 1985. International Traffic Separation Schemes in the New Law of the Sea', 9 *Marine Policy* 134-47.
PLANT, G., 1996. Navigation Regime in the Turkish Straits for Merchant Ships in Peacetime: Safety, Environmental Protection and High Politics, 20 *Marine Policy* 15-27.
PLANT, G., 1997. The Relationship between International Navigation Rights and Environmental Protection: A Legal Analysis of Mandatory Ship Traffic Systems. In Ringbom H. (ed.), Competing Norms in the Law of Marine Environmental Protection. Kluwer, London, 11-30.
PLANT, G., 2000. The Turkish Straits and Tanker Traffic: an Update, 24 *Marine Policy*, 193-214.
ROACH, J., Ashley, 1995. Responsibilities and Rights of Other States. Proceedings of the 29th Annual Law of the Sea Institute Conference, 225 *et seq.*
ROZAKIS, C., STAGOS, P., 1987. The Turkish Straits, Kluwer Press, Dordrecht.
SCHACTE, W., BERNHARDT, P., 1993. International Straits and Navigational Freedoms. 33 *Virginia JIL* 527-56.
TOLUNER, S., 1995. Rights and Duties of Turkey Regarding Merchant Vessels Passing through the Straits. In I. Soysal (ed.), Turkish Straits, New Problems and Solutions. TUDAV Press, Istanbul, 28 *et seq.*
TREVES, T., 1991. Navigation. In Dupuy R-J., Vignes D. (eds.), A Handbook on the New Law of the Sea. Hague Academy of International Law, Martinus Nijhoff, The Hague/London/Boston. 835 *et seq.*

WHICH STRAITS REGIME IN THE AEGEAN SEA?*

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The most crucial dispute for Turkey in the Aegean agenda is undoubtedly the question of the breadth of territorial sea. As was pointed out in my previous paper submitted to the Bodrum Symposium[1], the extension of the Greek territorial sea to twelve miles will result, not only in the extinction of all the rights which Turkey is entitled to in the high seas but will cut off direct communication between her Black Sea and Mediterranean Sea coasts, as well as the Aegean coast with the high seas. Looked from this angle, the extension of the Greek territorial sea in the Aegean raises a question of freedom of navigation and overflight, a vital and legitimate interest which finds expression in the elaborate provisions of the 1982 *UNCLOS* concerning straits.

Without prejudice to our conclusions regarding the nature of the twelve-mile territorial sea rule and its non-opposibility to Turkey in the Aegean, as well as the princible of non-encroachment applicable under the delimitation norms, it is our intention to bring into focus in this paper, whether or not, taking into consideration the chaotic state regarding the determination of the applicable straits regime in the Aegean, the preservation of the *status quo* in the Aegean, that is the present six mile as demanded by Turkey, would not simplify and thereupon facilitate the solution of all the interrelated Aegean disputes.

After some comments on the different passage régimes for straits and the normative value of the provisions regulating them, I will try to re-state the views of the coastal states as far as accessible and summarize the different proposals so far made regarding the implementation of the straits provisions of the *UNCLOS*.

1- *Different Categories of Straits*

The classical law of the sea as expressed in the Geneva Convention on the *Territorial Sea and the Contiguous Zone*[2] of 1958,does not differentiate the legal régime of passage through the territorial sea and the straits the breadth of which is less than twice the breadth of the territorial sea; with one exception, namely the

***** The views expressed in this paper are the personal opinion of the author and in no way binds the Turkish Government.

[1] TOLUNER, "Some Reflections on the Interrelation of the Aegean Sea Disputes", *Proceedings of the international symposium on the Aegean Sea*, 5-7 May 2000, edited by ÖZTÜRK, pp. 121-138; an enlarged version including continental shelf delimitation questions is published under the same title in, *Prof. Dr. TAHIR ÇAĞA'NIN ANISINA ARMAĞAN*, 2000, pp. 545-587.

[2] *UNTS*, vol. 516, p. 206.

prohibition on suspension of innocent passage, passage in the territorial sea is regulated by the same norms, the so-called innocent passage régime. This is no longer the case with the *UNCLOS*. The innovations brought about in the law of the sea, such as the adoption of the twelve mile territorial sea limit and the acceptance of the archipelagic principles, gave rise to the necessity of accomodating the user states interests with that of the *"states bordering the strait"*; in other words, the necessity of formulating the terms of the protection to be given to acquired rights (high sea freedoms of navigation and overflight) which will be adversely affected by the modification of existing legal order. The novel concepts *"transit passage"* and *"archipelagic sea lanes passage"* are the legal terms expressing the compromise[3] reached after tedious efforts for conciliation[4].

In terms of the applicable legal régime therein one may distinguish five categories of straits under the provisions of the *UNCLOS*:

(1) Straits "*in which passage is regulated in whole or in part by long-standing international conventions in force specially relating to such straits"* (Art. 35 (c)), the notable and the most frequently pronounced one being the Turkish Straits where passage is regulated by the Montreux Convention of 20 July 1936.

(2) Straits where "*there exists through the strait a route through the high seas or through an exclusive economic zone of similar convenience with respect to navigational or hydrological characteristics"* (Art. 36)[5], the high sea régime will be

[3] It must be noted that in the strait states proposals no distinction is made between passage in the territorial sea and the straits overlapped by the territorial sea, the régime of the latter being distinguished only in respect of the obligation of not suspending innocent passage. (See: Articles 2 and 5/4 of the draft articles on navigation through the territorial sea including straits used for international navigation submitted to the Sea-bed Committee by Cyprus, Greece, Indonesia, Malaysia, Morocco, Philippines, Spain, Yemen, (*A/AC. 138/SC.II/L.18*, General Assembly *Offficial Records, Supplement No. 21/A/9021*); article 21, 22/2 of draft articles on navigation through the territorial sea including straits used for international navigation submitted to the Conference by Malaysia, Morocco, Oman and Yemen (*A/CONF.62/C.2/L.16, Official Records*, vol. III, p.192); Article 4 of the draft articles relating to passage through the territorial sea submitted to the Conference by Fiji, (*A/CONF.62/C.2/L.19, Official Records*, vol. III, p.196).

[4] For a concise history of the provisions regarding straits see: MOORE, "The Régime of Straits and the Third United Nations Conference on the Law of the Sea". 74 *AJIL*, pp. 77-132 (1980): *United Nations Convention on the Law of the Sea, 1982; A Commentary*; vol. II, editors NANDAN and ROSENNE, 1993, pp. 279-399; NANDAN and ANDERSON, "Straits Used for International Navigation: A Commentary on Part III of the United Nations Convention on the Law of the Sea, 1982" 60 *BYIL*, pp. 159-204 (1989).

[5] On this point see: ALEXANDER, "Exceptions to the Transit Passage Regime: Straits with Routes of Similar Convenience", 18 *Ocean Development and International Law*, pp. 479-491, (1987).

applicable in those parts which will not be covered by the territorial sea of the coastal state.

(3) Straits used for international navigation "*between a part of the high seas or an exclusive economic zone and the territorial sea of a foreign State*" (Art. 45/1(b)) and straits which are "*formed by an island of a state bordering the strait and its mainland*" where there "*exists seaward of the island a route through the high seas or through an exclusive economic zone of similar convenience with respect to navigational and hydrological characteristics"* (Art. 38/1), the so-called Messina exception, the non-suspendable innocent passage régime will be applicable.

(4) Some straits in archipelagic waters, -in designated sea lanes and air routes thereabove, traversing archipelagic waters and the adjacent territorial sea used in transit between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone (Art. 53), the régime of archipelagic sea lanes passage which is regulated by reference to the transit passage régime (Art. 54), will be applicable.

(5) In all the other straits "*which are used for international navigation between one part of the high seas or an exclusive economic zone and another part of the high seas or exclusive economic zone"* (Art. 37), the transit passage régime shall be applied in passages traversing the strait without calling at a port in the straits, as well as in passages *"through the strait for the purpose of entering, leaving or returning from a state bordering the strait, subject to the conditions of entry to that state"* (Art. 38/2), so-called Malaysia-Singapore clause. As is clear from the wording of the text, in order to qualify as a strait where the transit passage régime operates, the geographical location of the strait and its function has to be considered: The twenty-four miles or less wide belt of water should be situated between one part of the high seas or E.E.Z and another part of the high seas or E.E.Z and be *"used"* in international navigation, this having the meaning of actual use and not *"normally"* "*customarily"*, *"traditionally"* in use. Thus the definition adopted by the I.C.J. in the *Corfu Channel* case[6] has not been changed.

There are important differences between these passage régimes:

Whereas under the innocent passage régime "*passage*" means unsubmerged navigation through the territorial sea (Art. 18/1, 20), under the transit passage régime "*passage*" means the exercise of the freedom of navigation which implicitly includes submerged passage if it is the "*normal mode*" of passage, as well as overflight, solely for the purpose of continuous and expeditious transit (Art.38/2, 39/1(c)). Although under the innocent passage régime coastal state jurisdiction is the rule, under this new régime it is confined to enumerated matters. The adoption of laws and regulations concerning the safety of navigation and the regulation of maritime traffic and, the prevention, reduction and control of pollution are subjects covered by coastal state jurisdiction; and yet, coastal states have not broad discretionary powers even in these respects: Ships in transit are under the obligation to comply only "*with the generally accepted international regulations, procedures*

[6] I.C.J. Reports, 1949, p. 28.

and practices for safety at sea" (Art 39/2(a)) and "*respect applicable sea lanes and traffic separation schemes*" established by the "*adoption*" of the competent international organization (Art.41/4,7); to comply "*with the generally aceepted international regulations procedures and practices for the prevention reduction and control of pollution from ships*" (Art. 39/3(b)). Not only coastal state laws and regulations is "*internationalized"* in substance., enforcement powers is reserved only in respect of violations "*causing or threatening major damage to the marine environment of the straits*" (Art. 233).

Unlike the innocent passage régime, there are no provisions regulating the extent of criminal or civil jurisdiction of coastal states over ships and aircraft in transit through the straits. In view of the phrase "*the exercise in accordance with this part*" used in the definition of the régime, this means that, as long as foreign vessels are in "*continuos and expeditious transit",* not engaging in any "*activity which is not an exercise of the right of transit passage*", such as unlawfully fishing or, loading or unloading any commodity, currency or person, in case of which the provisions of the innocent passage régime will be applicable (Art.38/3), the coastal state's obligation of not to "*hamper*" transit passage (Art.44) and not to enact laws and regulations "*which in their application have the practical effect of denying, hampering or impairing the right of transit*" (Art. 42/2) may be interpreted as excluding the power of the coastal states to interrupt transit passage for the purpose of exercising criminal and civil jurisdiction. Therefore, whereas under the innocent passage régime, a coastal state has the power to take the necessary steps to prevent passage that is "*not innocent*"(Art.25), no such power is provided for under the transit passage régime, although there are several provisions enumerating the obligations and duties of ships and aircraft in passage through the straits (Art. 39, 40, 41, 42)

In short, transit passage régime as formulated in the UNCLOS means, territorial sovereignty minus the freedom of continuous and expeditious transit in, under and over the strait; or, high seas freedom of navigation and overflight minus the expressly reserved coastal state powers. As such it is a new concept introduced and adopted at the Third United Nations Conference on the Law of the Sea. To say that it was already customary law then, is to look solely from the high seas freedoms part of it, which would not however reflect the new picture of it.

2- *The Nature of the Transit Passage Régime: Conventional or Customary Law?*

The UNCLOS of 1982 is first and foremost a treaty which creates rights and obligations for states who have consented to be bound by it and as a general rule "*does not create either obligations or rights for a third State without its consent*"[7], the so-called *pacta tertiis nec nocent nec prosunt* principle.This does not preclude "*a rule set forth in a treaty from becoming binding upon a third State as a customary*

[7] Art. 34 of the *Vienna Convention on the Law of Treaties*.

rule of international law"[8], the conditions for which is formulated by the I.C.J. as follows: "*a very widespread and representative participation in the convention might suffice of itselft, provided it included that of States whose interests were specially affected*"[9] and this practice "*both extensive and virtually uniform.... should moreover have occured in such a way as to show a general recognition that a rule of law or legal obligation is involved."*[10] It is not therefore legally impossible for this new concept to become customary law.

Has it become customary law? This question, which has lost some of its former zeal due to the fact that out of the 158 signatory states 135 states including most of the "*States bordering the straits*" have either ratified or acceded to the *UNCLOS* by now,[11] is still pending in the Aegean agenda. Juristic opinion has been divided on this point and extensive research work has been made covering the pre-conference, conference (1974-1982) and post-conference period in order to demonstrate the state of customary law in this respect.[12] While some writers including most of the Greek authors insist on the contractual character of the norms regulating the transit passage régime, others do not hesitate to accept the customary character of these norms[13] and some, taking account the link between the twelve-mile territorial sea rule and this passage régime, do not separate the fate of these two concepts.[14] Time and space does not permit the evaluation of these views here, without doing injustice to their authors.

And yet, considering the uncontestable fact that the transit passage régime in its origin and in all the stages of its development owes its existence to the prospect of extension of the territorial sea to twelve miles, the outcome of which

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[8] *ibid*. Art.38.

[9] *North Sea Continental Shelf, Judgment, I.C.J. Reports 1969, p.3*, parag. 73.

[10] i*bid*., parag. 74.

[11] The update of 24 January 2001, Division for Ocean Affairs and the Law of the Sea, *http: //www.un.org/Depts/los/los94st.htm*, 12.03.2001.

[12] See amongst others: CAMINOS., "The Legal Régime of Straits in the 1982 United Nations Convention on the Law of the Sea", 205 *RC*.V, pp. 178-231, (1987); YTURRIAGA, *Straits Used for International Navigation*, 1991; JIA, *The Régime of Straits in International law*, 1998.

[13] For example SCHACHTE cites this view as "*the United States unequivocal position that transit passage is customary international law that the provisions of the LOS Convention reflect*" and supports it by pointing out "*The fact that the vast majority of states today claim a 12-nautical-mile wide territorial sea and that the majority of coastal states claim exclusive economic zones, concepts both not recognized (indeed, the latter not even conceived) prior to the 1982 Convention, clearly reflects the validity of this position*". ("International Straits and Navigational Freedoms", 24 *ODIL*, pp. 185-186, (1993).

[14] See for example BERNHARDT, "Custom and Treaty in the Law of the Sea", 205 *RC*, p.247, 290, (1987); MAHMOUDI, "Customary International Law and Transit Passage", 20 *ODIL*, pp. 165-166, (1989).

will be the enclosure of 116 straits used for international navigation within that breadth entailing the loss of the high seas freedoms formerly exercised therein, it would seem more reasonable to treat the two as the two sides of the same coin, a *quid pro quo* if so preferred. In other words, there is no transit passage régime if there is not an extension of the territorial sea, there is no power to extend the territorial sea if transit passage régime is not going to be there applied.

The extension of the territorial sea to twelve miles is an unilateral act of the coastal state which is the condition for the application of the transit passage régime, "*d'un statut de droit international*" in the the words of REUTER, in case of which it is a general rule of international law and not the act itself that is the creator of the legal effects to be attributed to it.[15] If a coastal state is a party to the *UNCLOS*, in the words of the eminent jurist JENNINGS, "*Insofar as Article 38 refers to 'all ships and aircraft' it would seem that even a third party might benefit from that part of the treaty*."[16] Apart from the wording of Article 38, the language used in the provisions concerning the prohibition of discrimination "*in form and in fact*" among "*foreign ships*" figuring in both the innocent passage (Art. 24/1(b)) and transit passage (Art. 42/2) régimes supports the view that the intention was to create general norms, an objective régime in the sense of rights and obligations *in rem* and not purely contractual rights and obligations, and this, necessarily so.[17]

It is interesting to note that the United Kingdom, the father of this régime, long before becoming a party to the *UNCLOS* (by acession on 25 July 1997) in the discussions leading to the amendment of *The Territorial Sea Act* of 1987 which extended the territorial sea from three miles to twelve[18] and France, before ratifying the *UNCLOS* (on 11 April 1996), in Article 3 of the Law enacted on 14 December 1971 which expressly provided for arrangements to be made where the distance between the French coast and another state was twenty-four miles or less[19] were very considerate of the new régime. This understanding led to the *Anglo-French*

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[15] "Principes de Droit International Public", 103 *RC* II, p.576, (1961); on the concept of "juridical act, acte juridique" in general see: ANZILOTTI, *Cour de Droit International*, 1929, traduction GIDEL, pp. 333-354; VENTURINI, "Valeur Juridique des Attitudes et des Actes Unilatéraux des États", 112 *RC*, pp. 367-465, (1964); JEAN-PAUL JACQUE, "Acte et Norme en Droit International Public", 227 *RC*, pp. 361-417, (1991).

[16] "Law-Making and Package Deal", *Mélanges Offerts a Paul Reuter*, 1981, p.347,353.

[17] On this category of treaties see McNAIR, *The Law of Treaties*, 1961, pp. 255-271, 750-752; for the discussions in the International Law Commision see WALDOCK, "Third Report on the Law of Treaties", 1964 *YILC*, vol. II, pp. 26-34.

[18] See: 58 *BYIL*, 1987, p. 592 and especially 598-600.

[19] National Legislation on Territorial Sea, the Right of Innocent Passage and the Contiguous Zone, 1995, p. 131. For further information see: ANDERSON, "The Strait of Dover and the Southern North Sea-Some Recent Legal Developments", 7 *IJECL*, pp. 85-98, (1992).

Declaration of 2 November 1988 concerning the Strait of Dover which states that, "*The existence of a specific régime of navigation in straits*" "*is generally accepted in the current state of international law (est généralement acceptée en l'état actuel du droit international)*" in consequence of which the two governments have recognized the transit régime rights "*for merchant vessels, state vessels, warships following their normal mode of navigation as well as the right of overflight for aircraft*"[20], without making a distinction between the flag states and the states of registry. United States, although not a party to the *UNCLOS*, in the proclamation of 27 December 1988, by which she extended the territorial sea from three to twelve miles, has stated that, "*In accordance with international law as reflected in the applicable provisions of the 1982 Convention on the Law of the Sea, within the territorial sea of the United States, the ships of all countries enjoy the right of innocent passage and the ships and aircraft of all countries enjoy the right of transit passage through international straits*."[21] In search of a short answer it will not be inappropriate to ask this question: Assuming that these three states, the three great maritime powers who had vigorously defended the three mile limit, had objected to the twelve mile territorial sea concept, could anyone would still argue that it became a rule of customary law? The reason for not objecting to the twelve-mile territorial sea being the acceptance of this new régime for straits, it must be considered to be logically impossible to separate the two, especially in view of the fact that the negotiations had been conducted on the understanding of a "*package deal*".

If it is so, this raises the question pointed out by SCHACHTER[22] as to whether "*a non-party may claim the benefit of customary law rule that in the view of many states (and the convention) can only create a right if accompanied by conduct required under another rule*" such as "*dispute settlement obligations*"?

Another important question more pertinent in the Aegean, due to the fact that one of the coastal states is a a party (Greece) to and the other a non-signatory (Turkey) of the *UNCLOS*, is "*whether the right could be claimed against a non-party?*" JENNINGS, in whose view the "*non-party might benefit*" from provisions concerning transit passage, finds this "*doubtful*" regarding "*at least a non-signatory non-party*".[23] Narrowing the question further, would a non-signatory by benefiting from the application of the transit régime be treated as acquiescent of it, so that it will be under an obligation to apply it on its own straits?[24] This question is not

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[20] 92 *RGDIP*, p. 1043, (1988).
[21] *National Legislation*…., note 19., p. 411.
[22] "International Law in Theory and Practice", 178 *RC* V, p.9, 278.
[23] *op.. cit*., note 16.
[24] GOUNARIS, refering to an incident in the Strait of Kafireas (Cavo Doro), -the passage of a Turkish submarine "*by appealing to the customary character of the status of the transit passage*" -the accuracy of which cannot be proved by the present writer, threatens Turkey by taking steps to revise the Montreux Convention, and taking into account the "*existence of open sea in the area of Marmaras*", thereafter claim the application of transit passage régime in the Turkish Straits ("The

merely academic for the Aegean, especially in the relations of Greece with Turkey which is a state bordering the strait, not only in respect to the Turkish Straits covered by Article 35(c)) but also in the straits formed by her Aegean coast and the eastern Aegean islands. Since the very reason for voting against the *UNCLOS* text was exactly the contingency of enclosing the high seas areas traditionally used in international navigation and overflight within the twelve-mile territorial sea of Greece, in other words the intention of preserving the *status quo* implying the rejection of the transit passage régime, the régime of high seas will continue to be applicable in the newly formed straits in the relations with Turkey. Therefore the question will arise only in straits already covered by the six mile territorial sea of Greece. MAHMOUDI's observations on this point, though not very clear, has the merit of being consistent with the genesis of the concept. Finding the inherent link with the twelve-mile territorial sea decisive, he makes a distinction between straits more or less than six miles wide, a possibility not entirely overlooked at the Conference[25], and he concludes: "*in the case of straits with a breadth between 6 and 24 miles there seems to be little doubt that the transit passage régime should apply because it is, in fact, a curtailed right for the flag states, which hitherto have enjoyed freedom of navigation. But for the straits less than 6 miles wide, one is forced to consider other factors, because the change from 'innocent' to 'transit' passage has direct security implications for the strait states for whom the risk may not easily assumed solely for the sake of the right to extend the limit of the territorial sea*"[26]

Particularity of the Aegean Sea and the new Regulations of the International Law of the Sea", in *Mediterranean Sea and the Aegean*, Institute of Strategic and Development Studies "Andreas Papandreou", (1998), p.25,31. Notwithstanding the fact that the Sea of Marmara has been historically considered to be the internal waters of Turkey (See the Turkish delegation's intervention in the Geneva Conference, *Official Records*, vol. IV, p.20, parag.16 (1958)), and has always been treated as part of the same passage system, GOUNARIS cannot be ignorant of the difficulties to be encountered in case the question of revision becomes actual. Since this is a subject which cannot be treated summarily here, I refer to his co-patriots ROZAKIS - STAGOS in *The Turkish Straits*, (1987), International Straits of the World series edited by MANGONE. For information on the status of the Marmara Sea and Black Sea and the different conventions regulating passage through the Turkish Straits see: TOLUNER, *Milletlerarası Hukuk Dersleri*, fourth edition 1989, pp.154-185.

[25] In the proposal of Denmark and Finland (*A/CONF. 62/C.2/L.3*, *Official Records*, vol III, p.191) and in the proposal of Italy (*A/C.138/SC.II/L.30, Report of the Committee…*, vol. III, p.70) it is expressly provided for the application of the innocent passage régime, which was supported by Sweden in the Conference (*Official Records*, vol. II, p.129, parag. 23).

[26] *op. cit.*, not 14, p. 167.

3- *The Views of the Two Coastal States*

As a coastal state Turkey, who has voted against the text and has neither signed nor ratified the 1982 UNCLOS, had acted with reserve in the debates on straits. Content with article 35(c) which excludes from the operation of the transit passage provisions passage through the Turkish Straits[27] and confident that the twelve-mile rule would not be opposable to her in the Aegean in which case the use of freedom of navigation and overflight in most of the passages from her Aegean coast to the high seas will be uninterrupted, seems to have shaped her policy on the basis of the present *status quo* and in the preservation of it.

The other coastal state Greece, fully aware of the implications of the twelve-mile territorial sea in the Aegean, had tried in vain to counteract those against her interests, by becoming a co-sponsor of the draft which extended the archipelagic principles to archipelagos forming part of a coastal state[28] and to the straits states proposal[29] which, not only provided non-suspendable innocent passage régime for the straits but also brought some restrictions on the passage of some ships, such as foreign warships, nuclear-powered ships or ships carrying nuclear weapons or ships carrying nuclear substances and other dangerous substances whose passage might be subjected to prior notification or authorization (Art. 15, 16, 21), the requirement of use of designated sea lanes and of international insurance or guarantee being added to the latter category.

Failing on these points at the Conference, Greece tried to achieve the same objectives by a "*declaration*" dated 4 May 1982,[30] which was later confirmed at signature and ratification[31] concerning "*the provisions of Part III entitled 'Straits used for international navigation' and more especially the application in practice of articles 36, 38, 41 and 42*" which ran as follows: "*In areas where there are numerous spread out islands that form a great number of alternative straits which serve in fact one and the same route of international navigation, it is the understanding of the Greek delegation that the coastal State concerned has the responsibility to designate the route or routes, in the said alternative straits, through which ships and aircraft of third countries could pass under the transit passage*

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[27] The Turkish proposal to re-draft Article 35(c) of the ISNT (*Official Records*, vol. V, p.151, 159) so as to read "c) *The legal status and régime in which passage is regulated in whole or in part by long-standing international conventions in force specifically relating to such straits as well as the international conventions mentioned above*" (See: NANDAN-ROSENNE, op. cit., note 4, p. 305), seems to have had no effect, a modification bringing no substantive change anyhow.

[28] *A/CONF. 62/L. 4, Official Records*, vol. III, p.81.

[29] *A/AC. 138/SC. II/L. 18*, Report of the Committee…, vol. III, p.5, *General Assembly Official Records: Twenty-Eighth Session, Supplement No. 21(A/9021).*

[30] *A/CONF. 62/WS/26, Official Records*, vol. XVI, p. 266.

[31] Oceans and the Law of the Sea, *http://www.un.org/Depts/los/los decl.htm,* 25.03.2001, p. 19.

régime, in such a way that, on the one hand, the requirements of international navigation and overflight are satisfied and, on the other, the minimum security requirements of both the ships and aircraft in transit as well as those of the coastal State are fulfilled". The claim for a differential treatment in the Aegean has been justified by reference to the fact that, in the seas surrounding Greece there were "*about 340 straits, out of which 44 straits are formed between main islands, 16 by a main island and the coast of the mainland and 4 by projections of the mainland*". The presence in the area of the Aegean Sea no fewer than 19 "*high seas*" will result in that "*in order to join all the area of high seas to each other, the whole Aegean Sea would be criss-crossed by a multitude of straits*"[32].

Turkey, after stating that "*the limited exceptions provided in Articles 35, 36, 38/1 and 45"* excluded, "*all straits used for international navigation are subject to the régime of transit passage*" under the Convention, defined the Greek statement as an attempt "*to create a separate category of straits, i.e. 'spread out islands that form a great number of alternative straits' which is not envisaged in the Convention nor in international law*".[33] In the opinion of the Turkish Government, to retain the power and arbitrarily use it to exclude some of the straits which link the Aegean to the Mediterranean is not permissible either under the provisions of the Convention nor under the general rules of international law.

The nature of the Greek statement and the Turkish objection to it has been a subject of some dispute. Although the basis of this declaration has not been mentioned, in as much it "*purports to exclude or modify the legal effects*" of Part III provisions concerning the definition of straits subjected to the transit passage régime, it must be treated as a reservation[34], which is prohibited under Article 309 and therefore null and void. If it is made under Article 310, in order to be valid, it should "*not purport to exclude or modify the legal effect of the provisions*" of Part III "*in their application to*" Greece, which is exactly what is sought by this statement.

The views of the Greek jurists seems to be divided on this point: For ROUCOUNAS "*this declaration falls within the orbit of Art. 310*"[35]. DIPLA, although not stating the legal basis of this declaration, seems to assimilate it to a reservation, by pointining out the fact that, "*A ce jour, cette declaration n'a pas rencontré d'objection de la part des autres Parties à la Convention...*"[36] and again by treating the Turkish objection to it as producing no legal effect (*cette objection ne produit pas d'effet juridique*). Although it is true that, only signatories and states

[32] Informal memorandum of April 1976 cited in ROUCOUNAS, "Greece and the Law of the Sea", *The Law of the Sea*, edited by TREVES and PINESCHI, 1997, p.225,234.
[33] Statement of 15 November 1982, *A/CONF. 62/WS/34, Official Records*, vol. XVII, p. 226.
[34] Art. 2(d) of the 1969 Vienna *Convention on the Law of Treaties*.
[35] *op. cit.* note 32, p. 235.
[36] "La Mer Territoriale Grecque", *Hellenic Studies*, vol. 4, No. 3, 1996, p. 69,85.

who have expressed consent to be bound by the treaty may formulate reservations[37] or make objections to them, it is equally clear that the Greek declaration in order to "*have any legal effect*" has to be treated "*not*" as a reservation, in view of the prohibition of Article 309 and the restrictive language of Article 310. On the other hand, even if there was no provision expressly permitting it, negotiating states are not precluded to make statements concerning their stand, in respect to certain conventional norms or certain interpretations given to them; these statements, because they are not reservations are not treated as such. Their publication in the *Official Records* of the Conference is sufficient proof of its existence, entailing all the legal effects attributed to it by international law, under the concepts of acquiescence or estoppel amongst others.

Although sympathetic consideration of the Greek claim is not lacking in scholarly writings[38], what matters in this respect is the practice of states, including that of Turkey. The update of 24 January 2001[39] shows that, out of the 135 states who have expressed consent to be bound by the *UNCLOS* 49 states have made declarations under Article 310, out of which 11 states (France, Germany, Malaysia, Netherlands, Nicaragua, Norway, Portugal, Russian Federation, Saudi Arabia, Ukraine, United Kingdom) and the European Union have objected to these declarations; either in general terms by expressing the intention of not being bound by them or by specifying that they cannot have the legal effect of modifying, amending or excluding the provisions of the Convention. The objections of the United Kingdom and the Netherlands seems to be more in point. For the

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[37] Article 20 of the 1969 Vienna *Convention on the Law of Treaties.*

[38] For example YTURRIAGA, not hiding bitter feelings regarding the transit passage régime which he considers to be clearly discriminatory against states bordering the straits, has treated this declaration to be "*in full conformity with the wording and spirit of the Convention*". (*Straits Used for International Navigation – A Spanish Perspective*, 1991, p. 295, 320). JIA, observing that the Greek declaration "*may not necessarily run counter to Article 38(1), unless Greece were to implement it in straits between the islands*", has found the implementation of it sensible in localities were Greek islands like Rhodes are situated right in front of the Turkish coast. In the opinion of the writer, "*The straits between the islands and the Turkish coast do not, like those alternative straits, form the normal routes in the area*" (*The Régime of Straits in International Law*, 1998, pp. 142-143). It is astonishing not to find a hint of the navigational interests of Turkey in this interpretation under which Greece, the sole beneficiary from the extention of the territorial sea to twelve miles is found eligible for a more flexible and equitable treatment at the expense of Turkey who would be deprived of all the high seas freedoms she actually exercises in the Aegean Sea. But, even under this view, "*Greece can do no more than Article 38(1) allows, i.e. identify alternative routes seaward of each island-mainland straits. The rest of the straits should be treated in accordance with Article 38, 45 or 36*" (*loc. cit.*).

[39] *supra*, note 31.

Netherlands, considerations of domestic security and public order should not affect navigation and the routes and sea lanes should be established in accordance with the rules provided for in the Convention. Claims to archipelagic status in contravention of Article 46 will not be acceptable.[40] In the opinion of the United Kingdom the declarations which are found to be "*not in conformity with articles 309 and 310"* include, "*those which are incompatible with the provisions of the Convention relating to straits used for international navigation including the right of transit passage*" and *"those which are incompatible with the provisions of the Convention relating to archipelagic states or waters, including archipelagic baselines and archipelagic sea lanes passage*".[41] Taking into account the fact that not many states[42] except Greece have made declarations touching upon these questions, the addressee of these objections is apparent.

4- *Proposals on Passage Régimes in the Aegean*

The implications of the extension of Greek territorial waters to twelve miles, especially the fact that some passageways which are presently part of the Greek territorial sea would fall under the transit passage régime (between Euboea (Evvovia) and Andros or Cape Sounion and the north of the Cyclades islands) has been of serious concern to some Greek jurists, so much so that they have sought solutions remedying the situation.

DIPLA, after pointing out the fact that the passage of foreign vessels in the Aegean follow two grand axes, (namely the straits formed by the islands of Andros and Euboea, Kéa and Kythnos, Kithira and Antikithira or Antikithira and Crete on the west and between the islands of Cyclades and Dodecanese that is between Mykonos and Icaria, Amorgos and Kalymnos, Astipalée (Stampalya) and Nissiros, the island of Rhodes and Carpathos (Scarpanto) or Cassos and Crete on the east), proposes the application of the transit passage régime in those straits even in the relations with non-party states in order to dispel fears arising from the extension of the territorial sea. The question as to how this generous attitude would be of any help to Turkey, who will be strangled by the twelve-mile Greek territorial sea in her Aegean coast, is not found worthy of consideration. Whether these straits will fall under that category of straits which, in the opinion of the writer, will be reduced in number due to the

[40] *ibid*., p. 23.
[41] *ibid*., p. 36.
[42] Yugoslavia has reserved the right to determine by its laws and regulations which of the straits used for international navigation the régime of innocent passage shall be retained; not as restrictive as the Greek statement because there is an express reference to Articles 38/1 and 45/1 (a) (*ibid*., p. 39) as the legal basis for such action. Philippines stated that archipelagic waters was treated as internal waters under the Constitution which "*Removes straits connecting these waters with the economic zone or high sea from the rights of foreign vessels to transit passage for international navigation*." (*ibid*., p. 29).

fact that the high sea regions will be transformed into Greek territorial sea, as a result of which these straits will be connecting two parts of Greek territorial sea where the innocent passage régime is applicable, is not discussed.[43]

Expressing concern about the serious problems of security which would arise by the transformation of passages between Euboea and Andros or between Cape Sounion and the northern Cyclades islands SYRIGOS, in order to "*avoid any possible consequences of the creation of international straits among the Aegean Islands*" and to give "*Turkey the right of free navigation throughout the Aegean to the Mediterranean Sea*" proposes to *leave outside* the Greek territorial waters "*corridors of high seas connecting the pockets of the high seas which would otherwise remain encircled in the areas between the Dodecanese islands and the Cyclades islands*", high seas corridors, "*in the two passage between Rhodes, Karpathos and Crete"* the breadth of which could be "*the minimum breadth of the corridors which exist today in the Aegean between the Dodecanese and the Cyclades islands*".[44] Again, nothing is said about the régime of passage in straits that will be formed between the East Aegean Greek islands if the territorial sea is extended to twelve miles, those that should be used before access to the said high sea corridors.

POLITAKIS, unlike the Antikithira and Kasos straits where in his view the transit passage régime is applicable "*without difficulty*", favours the innocent passage régime in the Karpathos Strait and the straits formed by the Greek islands Kos and Astipalaia, Amorgos and Kalimnos, Naxos and Patmos, Mikonos and Ikaria, Euboeo and Andros or Cape Sounion and Kea, due to the fact that they connect one part of the high seas in the south with a limited and isolated pocket of high seas in the north. Without however rejecting the possibility of treating "*all the above mentioned straits*" as "*organically interconnected forming continuous maritime routes linking the Mediterranean with the northern Aegean and thus subject to the transit passage rules*."[45] Expressing doubts as to "*whether ships leading to or departing from Turkish ports in the Aegean coast such as that of İzmir could equally be deemed as engaged in transit passage*", excludes the application of Article 38/2, due to the fact that the Turkish ports "*cannot be considered as bordering the straits... as making part of the coasts which define the strait*."[46] Instead of the high seas régime presently applicable between the eastern Aegean islands, he finds no difficulty in concluding that, Turkish concerns about navigational mobility would be appeased by the application of the innocent passage régime to ships entering or clearing certain Turkish ports in the Aegean coast. In his view, Turkey would benefit from the transit passage régime in the other straits, if "*in the eyes of the Greek Government it already reflects international customary law*"

[43] *op. cit.*, note 36, pp. 83-85.
[44] *The Status of the Aegean Sea According to International Law*, 1998, p. 454.
[45] "*The Aegean Agenda: Greek National Interests and the New Law of the Sea Convention*", 10 *IJMCL*, p. 497, 503.
[46] *ibid.*, p. 505.

[47], an invitation to become the persistent objector, justifying the frequently expressed Turkish apprehensions.

In order to find justification for a selective approach in the Aegean straits another Greek jurists, STELAKATOS-LOVERDOS, boldly proposes "*to take into account the practice relating to channels of navigation in the application of the provisions of the LOS Convention on Straits*",[48] the presence of which is defined in terms of "*the 'extent' of the coast lines constituting the arms of the channel and the breadth of the strip of water between the respective arms*" and also "*the geography of the passage as such, so that the extent of pockets or the breadth of corridors of high seas in longer or broader straits are taken into consideration in relation to the extent of the coastline of the channel, in order to ascertain whether a strait really exists in a geographical sense*."[49] Lack of continuity in one or even both shores of the channel and the fact that the channel has a continuous coastline on one side but islands on the other is irrelevant under this view; what is questionable for the writer is the case of "*opposite series of islands separated by a narrow stretch of sea forming in consequence a series of connected straits*."[50] The purpose of this endeavor to re-write the relevant norms being the same: to "*enable in the case of numerous alternative straits to determine further the degree of use necessary to distinguish between non-regular use that establishes the functional element, and purely episodic use that is in fact too slightly or short-lived to be sufficient.*"[51]

Nevertheless conceding that alternative and lateral straits fall in the ambit of Articles 37 and 38, he has referred to the theory of abuse of rights; and relating the concept "*to rights not exercised with reasonable regard to the interests of the other concerned states*" has concluded that "*the exercise of the right of transit passage is not unlimited*."[52]

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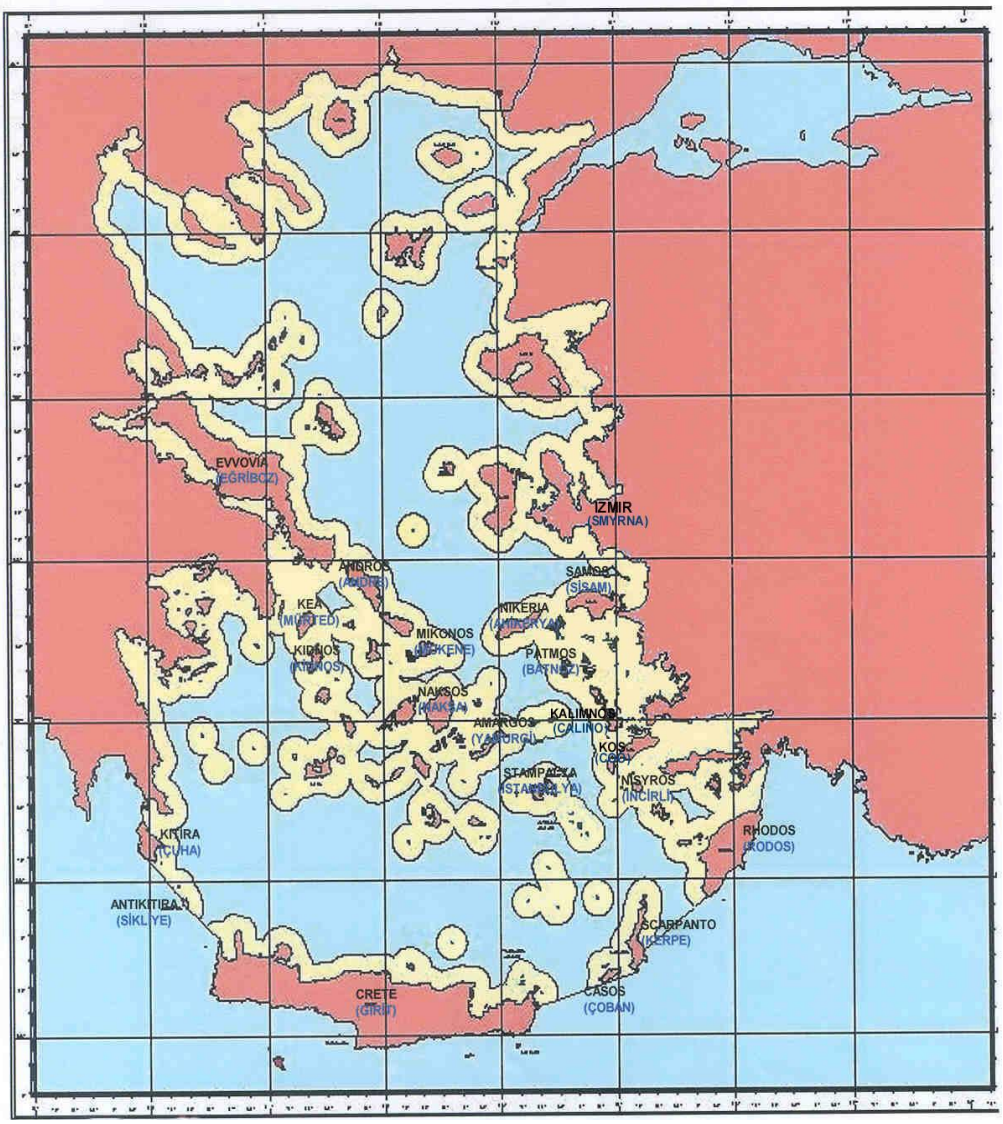
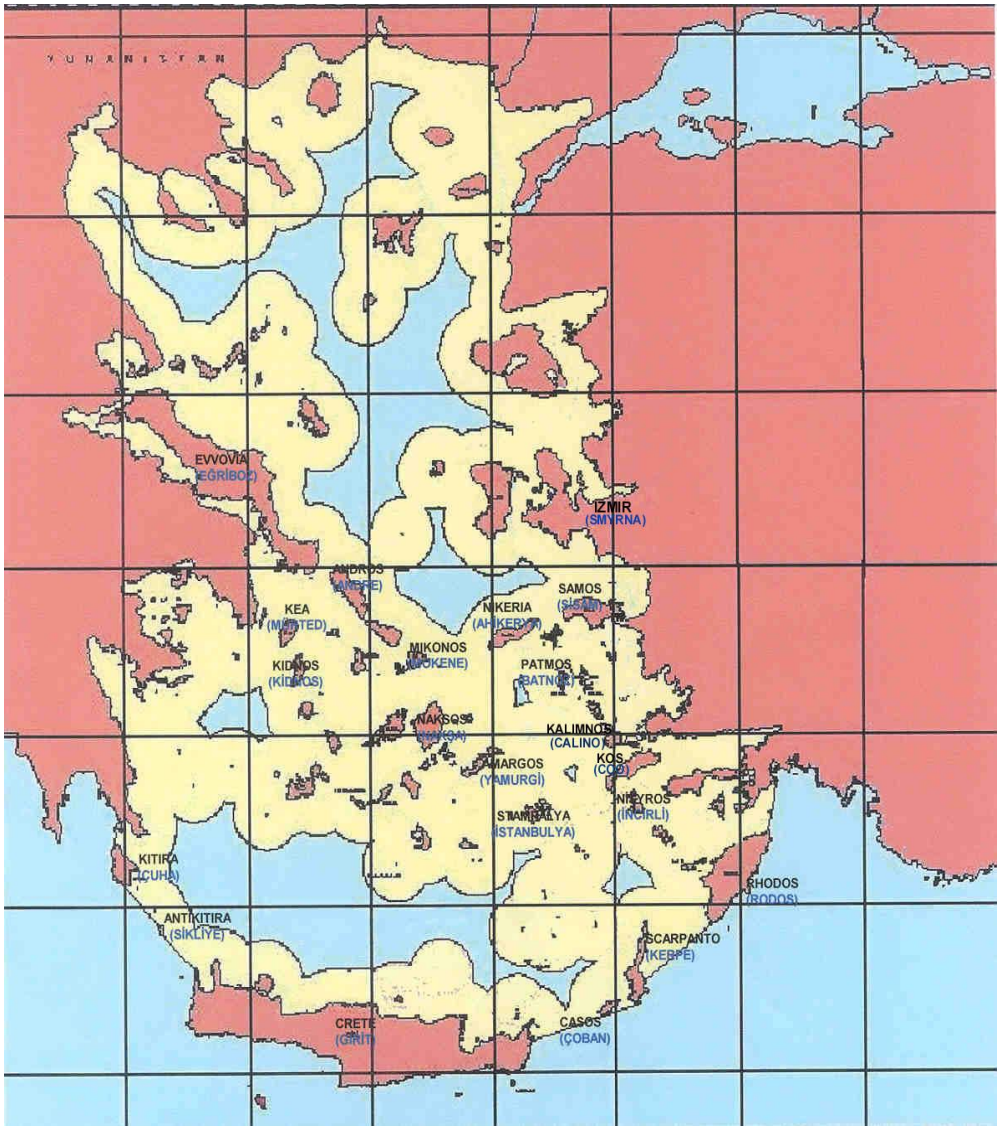
[47] *loc. cit.*
[48] "The Contribution of Channels to the Definition of Straits Used for International Navigation", 13 *IJMLC*, (1998), p. 71, 74.
[49] *ibid*., p. 75.
[50] *ibid*., pp. 74-75.
[51] *ibid*., p. 79.
[52] *ibid*., p. 83, footnote 45.



TERRITORIAL SEA AND HIGH SEA AREAS UNDER THE PRESENT SIX-MILE LIMIT



TERRITORIAL SEA AND HIGH SEA AREAS IF TWELVE-MILE IS IMPLEMENTED

It is, after all a consolation to see a Greek jurist speak about the restrictive effect of this principle on the exercise of rights, the very Turkish thesis regarding the extension of the territorial sea.

Some Greek jurists try to find some comfort in the statement of NANDAN-ANDERSON, made while referring to the Aegean Sea "*where there are several islands lying together, or where it is not clear what is a State's 'mainland'* ", to the effect that a "*common-sense*" interpretation taking into account "*all the relevant geographical and other circumstances*"[53] should be made; and again in cases where "*a 'pocket' of high seas is surrounded by territorial sea and is not used as part of a route*" that, under the "*common-sense*" approach there would be no justification for applying the transit passage régime instead of the innocent passage régime.[54] The question remains however, whether this "*common-sense*" interpretation would justify claims to enclose high seas areas traditionally used in international navigation, which certainly includes the use of the other coastal state.

It might be interesting to refer to the comments made by OXMAN, who has been inside the law-making process from the very beginning, in order to compare the views of jurists belonging to third-party non-coastal user states.[55] Finding the drawing of analogies from the archipelagic principles difficult to make due to the fact that it was "*after consideration of precisely that issue, including its potential application to areas such as the Aegean*" that "*the UN Convention expressly applies the archipelagic waters régime only to states comprised wholly of islands*"[56] has defined the view proposing the application of Article 45/1(b) to passages to and from the Turkish Aegean coast as "*not the most helpful or accurate analyses*" on the following grounds: "*Conceptually, the 'strait' of a relevant part of western Anatolia divides two parts of the high seas (or EEZ) because it turns perpendicular to the Anatolian coast along a continuous territorial sea, first of Turkey and then of Greece. From that point of view there is a right of transit passage between these two parts of the high seas (or EEZ) through a continuous strait bordered by both Greece and Turkey*."[57] Pointing out that the definition of transit passage includes "*passage through the strait for the purpose of entering, leaving or returning from a state bordering the strait*" has interpreted the geographical facts as follows: "*Where there is a continuous expanse of territorial sea… emanating from the coast of western Anatolia that separates two parts of the high sea (or EEZ), there is a right of passage between those two parts of the high seas (or EEZ) and, in addition, between one part of the high seas (or EEZ) and either Greece or Turkey*" This

[53] *op. cit.*, note 4, p. 181.
[54] *ibid.*, p. 179.
[55] "The Application of the Straits Régime Under the UN Convention on the Law of the Sea in Complex Geographical Situations such as the Aegean Sea", *The Passage of Ships through Straits*, International Conference sponsored by Defence Analyses Institute, 23 October 1999, p. 25.
[56] *ibid.*, p. 31.
[57] *loc. cit.*

would in his opinion, "*apply to traffic to and from Izmir*".[58] Expressing doubts as to "*whether there is, or ever will be, a strategically significant route subject in fact to the restraints of article 45/1(b)*" which "*may simply be inadequate to give full effect to the non-enclavement principle*" and, considering the lessons to be derived from the history of the law of the sea, to the effect that "*if it has a choice, no state will subject its vital communications links to the discretionary control of another state*"[59], has proposed a solution based on Article 36, i.e. to limit the breadth of the territorial sea so as "*to leave a high seas (or EEZ) route of similar convenience running through the waters comprising a strait used for international navigation*"[60] and this by agreement to be arrived by consultations between the coastal states and the other affected states including major maritime countries with an interest in communication in the area.[61].

As a matter of fact, in localities where the extension of the territorial sea raised questions of direct access to the high seas, the coastal states have refrained to apply the same breadth of territorial sea in such places. Japan, by the supplementary provisions to the Law of the Territorial Sea dated 2 May 1977[62] which extended her territorial sea to twelve miles, excluded the *Soya Strait*, the *Tsugaru Strait*, the eastern channel of the *Tsushima Strait*, *Osumi Strait*, including areas of the sea adjacent to these waters which are recognized as forming the integral parts thereof from the point of view of the course normally used for navigation[63], where the three-mile territorial sea continues to be applicable. Federal Republic of Germany, who extended the territorial sea to twelve miles by the proclamation of 11 November 1994,[64] has implemented it in the Baltic Sea, "*by leaving a high sea corridor open*", on the understanding that it should not be construed as meaning a renunciation of her "*legal claim to the full breadth of the territorial sea*". The same is true with the German Democratic Republic, who by the ordinance of 20 December 1984 defined the outer limit of the territorial sea inward of the twelve-mile line, inward of the median line in relation to the Danish territorial sea, due to the geographical features of the coast and the requirements of shipping.[65] Sweden, with the 20 December 1979 amendment to the Territorial Waters Act[66] extended her territorial sea to twelve miles, with some exceptions in *Skagerrak*, *Kattegatt*, *Öresund*, *Börnholmsgattet*, *Gulf of Bothia*, *Aland Strait* with the aim of either preserving the established frontier lines or the four mile limit. In order *to avoid the application of the transit passage*

[58] i*bid*., p. 31-32.
[59] *loc. cit.*
[60] *ibid*., p. 33.
[61] *ibid*., p.34.
[62] *National Legislation…*, Note 19, p. 1777.
[63] *loc. cit.*
[64] *National Legislation…*, Note 19, p. 137.
[65] WOLFRUM, "Germany and the Law of the Sea", *The Law of the Sea*, edited by TREVES-PINESCHI, 1997, p. 199-205.
[66] *National Legislation…*, Note 19, p. 361.

régime in some of the straits, Sweden and Denmark have agreed not to extend their territorial sea up to the median line (in areas around *Skagen*, *Laesö*, *Anholt*, *Bornholm* and in areas north and south of Öresund) so as to leave a navigable channel of high seas in certain passages.[67] Finland by the 1995 amendment to the Territorial Act of 1956 and Estonia by the Act on Maritime Borders of March 1993, considering that St. Petersburg and the Russian naval base Cronstadt is situated at the bottom of the gulf of Finland, have not extended their territorial sea up to twelve miles in this area, each leaving a three-mile channel of high seas, i.e. a six-mile wide channel in total, in order to maintain free passage in the middle of the gulf.[68]

Restating the question posed at the beginning of this paper, would it not simplify the problem further if Greece refrained to extend her territorial sea in the Aegean, instead of being bothered with questions such as the location and width of such high seas corridors, which in most places will give the same result, and with trying to find legal justification for a certain practice consent to which might not be easily forthcoming. Such a radical but not unusual solution, will not only facilitate the settlement of the other disputes with Turkey for whom the extent of the territorial sea is the most vital, but also will relieve her from painstaking disputes which will unavoidably arise from the application of this new régime to a maritime area, where the high sea character, in addition to the special geographical features, has traditionally been a dominant factor. Turkish stand on the non-opposability of the twelve-mile limit in the Aegean will be added to these difficulties because in the relations with Turkey navigation and overflight will continue to be governed by the high seas régime in these newly formed straits. It should not be forgotten that, it is not Greece who has hastily became bound by the *UNCLOS* and therefore under an obligation to apply its provisions, but the non-party Turkey who by her practice is in a position to lead the formation of customary rules serving the interests of both states in this troublesome sea, *if and when sufficient consideration is given to her vital and legitimate interests.*

In concluding, I would like to reiterate once again that, Aegean Sea disputes are complex and interrelated problems, a final and permanent solution of which requires an over-all settlement by negotiations. To insist on a piecemeal approach will result in the loss of the proper perspective in the interpretation of the relevant international norms, which never lacked the necessary coherence.

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[67] JACOBSSON, "*Sweden and the Law of the Sea*", in TREVES-PINESCHI, *op. cit*., Note 65, p. 499-500.

[68] KOSKENNIEMI-LEHTO, "Finland and the Law of the Sea", in TREVES-PINESCHI, *op. cit*., note 65, p. 131.

ISLANDS AND MARITIME BOUNDARY DELIMITATION IN THE SEMI-ENCLOSED SEA OF THE AEGEAN

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Maritime boundary delimitation in the Aegean has been the source of an enduring dispute between its parties and the subject of many symposia and academic writing. In addition to its inseparability from the matter of the breadth of the territorial sea and the drawing of baselines[1], the issue itself is complicated by the presence of numerous islands (which also played the leading role in the *Aegean Sea Continental Shelf Case* of 1978 the ICJ found itself to be without jurisdiction) and the fact that the Aegean is a narrow semi-enclosed sea, not "leaving room for a significant adjustment"[2] of any provisional line. These two latter characteristics constitute the axes of this paper which aims to put the effects of islands in the Aegean Sea in a geographical perspective. Focus is on the delimitation of the continental shelf which is one issue that Turkey and Greece at least agree on being in dispute. Delimitation of the territorial sea in the Aegean Sea involves the law of treaties questions with regard to the 1932 Italo-Turkish Agreement, which is outside the scope of this paper. However, in view of the fact that the ultimate aim of the delimitation of territorial sea is also an equitable result[3], the following considerations will apply to it with at least equal force.

I. Positions of the Parties

The formal positions of Turkey and Greece regarding the delimitation of the Aegean Sea may be identified through their diplomatic correspondance and negotiations especially prior to the *Aegean Sea Continental Shelf Case* (hereinafter *Aegean Sea*

[1] On this subject see: TOLUNER, Sevin; "Some Reflections on the Interrelation of the Aegean Disputes"; in *Prof. Dr. Tahir Caga'nin Anisina Armagan*, 2000, pp. 545-587.(A shorter version of this article is in *Proceedings of the International Symposium "The Aegean Sea, 2000"*, Bayram Öztürk (ed.), 2000, pp. 121-138)

[2] *Case Concerning the Continental Shelf (Libyan Arab Jamahiriya /Malta), ICJ Reports1985*, p.13, para.73

[3] See the statement by Ambassador Kirca at the final session of UNCLOS III, *Official Records of Third United Nations Conference on the Law of the Sea*, vol. XVII, p.76. Also in accord KWIATKOWSKA, Barbara, "Maritime Boundary Delimitation Between Opposite and Adjacent States in the New Law of the Sea-Some Implications for the Aegean", in *The Aegean Issues: Problem and Prospects*, 1989, Foreign Policy Institute, pp. 181-220, on p. 185, and FELDMAN, Mark B., "International Maritime Boundary Delimitation: Law and Practice from the Gulf of Maine to the Aegean Sea", in *Aegean Issues: Problems- Legal and Political Matrix*, 1995, Foreign Policy Institute, pp.1-22, on pp. 7-8.

Case). Subsequent developments in international law of maritime boundary delimitation seem to have led to only minor modifications in the respective positions of the parties.

The running thread in the Greek position is the paramount emphasis on entitlement of islands to continental shelf. Greece asserts that its islands are entitled to their own continental shelf. Based on this entitlement and coupled with their territorial and political unity with the Greek mainland, the delimitation line is then proposed as the median between the easternmost Greek islands and the Turkish coast.[4] This still seems to be the unchanged position of Greece.[5]

Turkey, on the other hand, relied on geomorphological structure of the Aegean, indicating the existence of a physical natural prolongation of Turkish coast on which the Greek islands were situated. Thus, these islands were not to have a continental shelf of their own. Rejecting the Greek contention that median was the obligatory method, Turkey put forward the necessity of delimitation by agreement, based on the principle of non-encroachement on another State's natural prolongation. The islands in question, being in a semi-enclosed sea, were identified as a typical example of special circumstances.[6] "A fair agreement based on equitable principles"[7] would need to take into account the "vital, strategic, economic and political interests" of both countries in the Aegean where its resources have been freely and equally shared by peoples of both sides.[8] The maintenance of this balance of interests established by the 1923 Lauseanne Treaty of Peace[9] on the basis of equal utilization of the Aegean was put forward as a relevant circumstance.[10] While rejection of continental shelf appertaining to the islands is absent, delimitation by agreement in accordance with equitable principles and taking into account all relevant circumstances - the character of the Aegean as a common sea between Turkey and Greece, the preservation of the political balance of interests established by Lauseanne Treaty among them - still remains the Turkish position.[11]

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[4] Application Instituting Proceedings Submitted by the Government of Greece, *ICJ Pleadings, Aegean Sea Continental Shelf*, p. 10.

[5] *http://www.mfa.gr/foreign/bilateral/aegeen.htm* visited on 12.04.200.

[6] Note Verbale Turque, 27 fevrier 1974, *ICJ Pleadings, Aegean Sea Continental Shelf*, p.23-24.

[7] Turkish Note Verbale, 30 September 1975, *ICJ Pleadings, Aegean Sea Continental Shelf*, p.36

[8] Turkish Note Verbale, 18 November 1975, *ICJ Pleadings, Aegean Sea Continental Shelf*, p.40-41.

[9] 28 LNTS 13 (1924)

[10] Rencontre greco-turque des 19 et 20 juin 1976, *ICJ Pleadings, Aegean Sea Continental Shelf*, p. 159. Any relevancy of the Lauseanne Treaty was rejected by Greece in the same negotiations, *ibid*, p.159.

[11] http://www.mfa.gov.tr/grupa/ad/ade/aded/Aegean.htm visited on 05.07.2000.

II. Assessment of the Positions of the Parties

Entitlement – Delimitation

Contentions based on rules governing entitlement to continental shelf merit attention first, not only as being central in Greek position but also as being the decisive element in determining whether Turkey has a valid claim to the areas in dispute in the Aegean. As already mentioned, entitlement of the Greek islands to continental shelf is seen by Greece as the principle or criterion to be applied to the delimitation of the Aegean Sea continental shelf, and consequently leading to the use of strict equidistance between the islands and Turkish coasts. Circularly, this delimitation method is also used to derive rights over the parts of the continental shelf. This argument is formulated as: "the rule of international law respecting the delimitation of common continental shelf boundaries in the case of opposite States is the median line rule" and this being applicable irrespective of insular or continental nature of the seabed, the former proposition is considered as conferring legal rights upon Greece. This leads Greece to consider itself "under no obligation to negotiate a settlement which would involve any surrender of these rights".[12] Even a joint exploration scheme is regarded as such a concession which further limits any alternatives for the resolution of the dispute. It must be borne in mind that rules governing delimitation do not accord rights over continental shelf. Rather, these rights are conferred on the coastal State by virtue of the rules governing title (be it natural prolongation or distance) and then delimitation rules determine the spatial extent of these rights when they overlap with those of another equally entitled State.

International jurisprudence has not held the concepts of title to continental shelf and delimitation thereof to be identical. In *North Sea Continental Shelf Cases* (hereinafter *North Sea Cases*)[13] the ICJ has declared that "[t]he appurtenance of a given area, considered as an entity, in no way governs the precise delimitation of its boundaries".[14] In the 1977 *Case Concerning the Delimitation of the Continental Shelf*[15] (hereinafter *Anglo-French Arbitration*) United Kingdom had argued for the use of Channel Islands as basepoints on the basis that islands were entitled to their own continental shelf which merged together with the shelf of its mainland. The Court rejected this argument ruling that the continental shelf to the north and north-west of the Channel Islands was not automatically and necessarily appurtenant to them and by enclaving them in a mainland median boundary. [16] Even when the ICJ found the basis of title to have become distance in the *Case Concerning the*

[12] Statement of the Greek Delegation at the Meeting of Experts of the Governments of Greece and Turkey in Berne on 19 and 20 June 1976, , ICJ Pleadings, Aegean Sea Continental Shelf, p. 47.
[13] North Sea Continental Shelf , Judgment, ICJ Reports1969, p.3.
[14] Ibid., para. 46.
[15] 54 ILR 4 (1979)
[16] *Ibid. para.s 168-169.*

Continental Shelf (Libyan Arab Jamahiriya /Malta)[17] (hereinafter *Libya /Malta Case*) it declared that the questions of entitlement and of delimitation are complementary but distinct.[18] In this context, it is important to remember that the ICJ rejected that the consideration of equidistance, even as a preliminary step, was required on the basis of title.[19]

In the same judgment, ICJ held that the choice of criterion of delimitation had to be consistent with the legal basis of title, but emphasized that it also has to conform to the "fundamental norm" of achieving equitable solution, on the basis of the application of equitable principles to the relevant circumstances.[20] The award of the Court of Arbitration in the *Case Concerning the Delimitation of Maritime Areas Between Canada and France*[21] (hereinafter the *St. Pierre and Miquelon Arbitration*) demonstrates this point clearly in regard to the title of islands to continental shelf. The Court of Arbitration accepted that the French islands of St. Pierre and Miquelon have title to a full 200 nm zone, however granted this zone to its full extent only in the narrow sector to the south where they had a coastal opening *unobstructed by any rivalling Canadian title*[22]. The solution adopted in the western sector and in the area to the east of this coastal opening (in the latter, St. Pierre and Miquelon's zone was limited to only a territorial sea, due to the Court's express concern to avoid any encroachment upon the Canadian projection[23] which also reveals that the Court has given the principle of non-encroachment more weight than the basic entitlement[24]) makes it clear that the entitlement of islands to a full "200 nm zone cannot be taken as being absolute or even predominant, as it must be balanced against the equal right and interests of the other State(s) concerned and subject to the application of equitable principles in the light of the relevant circumstances."[25] Thus, presentation of the Aegean dispute as only a question of entitlement of islands to continental shelf is an incomplete formulation.

Equidistance

International decisions and awards persistently reject the notion of any obligatory method. As already mentioned, even title based on distance does not make equidistance an obligatory method. "The application of equitable principles in the

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[17] *Case Concerning the Continental Shelf (Libyan Arab Jamahiriya /Malta), ICJ Reports1985*, p.13.
[18] *Ibid.*, para. 27.
[19] *Ibid.*, para.s 42, 43.
[20] *Ibid.*, para.s 61-62.
[21] 31 ILM 1145 (1992)
[22] *Ibid.*, para.70.
[23] *Ibid.*, para.71 in connection with para. 70.
[24] de La FAYETTE, Louise, "The Award in the Canada-France Maritime Boundary Arbitration", *8 International Journal of Marine and Coastal Law 77 (1993)*, p.96.
[25] *ibid*., p. 96. Also see the *St. Pierre and Miquelon Case*, *supra*. fn. 20, para. 45.

particular relevant circumstances may still require the adoption of another method, or combination of methods, of delimitation, even from the outset."[26]

Even the application of a provisional equidistance line on the ground that it is considered to be "appropriate" as a starting point,[27] which then may be adjusted[28] when it is a delimitation between opposite coasts is unwarranted because it overlooks the geographical reality that Turkey and Greece also share a common land boundary in the north of Aegean, making them adjacent States in northern Aegean.[29] Obviously, method or combination of methods employed must give equitable expression to the circumstances of the relevant area, the relationship between the coasts being one of them.

Moreover, claiming that the relationship between the Turkish and Greek coasts is one of oppositeness in order to urge the use of equidistance between the islands and the Turkish coast calls into question whether the east facing coasts of the Greek islands may lawfully constitute the sole relevant Greek coast, and consequently, the basepoints from which the proposed median is measured. These are examined below in section III. The divergence of the lines proposed by Eritrea and Yemen in the 1999 arbitration[30], notwithstanding they were all based on equidistance, illustrates that determining which are the "coasts" of the parties that generate maritime zones is more critical for the determination of the specific boundary than the applicability or otherwise of equidistance. Significantly, the Court constructed the boundary in the narrow Red Sea involving several mid-sea islands, as "a median line between the opposite *mainland* coasts"[31] A similar situation arose

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[26] *Libya /Malta Case*, *supra* note 17, para. 43, also referring to the failure of equidistance to gain acceptance at the Third UN Conference on the Law of the Sea.

[27] *Maritime Delimitation in the Area between Greenland and Jan Mayen, Judgment, ICJ Reports 1993*,p.38, (hereinafter *Jan Mayen Case*) para. 51, 56. Even then the ICJ considered the provisional use of median being only on the assumption that it will lead *prima facie* to an equitable result - the aim of any delimitation, as reiterated in para. 48.

[28] Indeed as the ICJ declared, "the equidistance method has never been regarded, even in a delimitation between opposite coasts, as one to be applied without modification whatever the circumstances" (*Libya/Malta Case*, *supra* note 17, para. 65)

[29] This was duly pointed out in the Observations of the Government of Turkey on the Request by the Government of Greece for Provisional Measures of Protection, , *ICJ Pleadings, Aegean Sea Continental Shelf*, p. 70. Sir Arthur Watts also drew attention to this aspect of the relationship between the Turkish and Greek coasts, WATTS, Sir Arthur, "Delimitation in the Aegean Sea: Implications of Recent International Judgments" in *Aegean Issues: Problems- Legal and Political Matrix*, 1995, Foreign Policy Institute, pp.111-145, on p.119.

[30] Eritrea - Yemen Arbitration of 17 December 1999, Phase II , *http://www.pca-cpa.org/ERYE2TOC.htm* visited on 06.02.2000.

[31] *Ibid.*, para.132. Emphasis added.

in the *Anglo-French Arbitration* when both France and United Kingdom were in agreement on the use of equidistance method but diverged in respect of the use of Channel Islands as basepoints for its construction leading to very different lines.[32]

III. Effect of Islands on Delimitation

The extent of continental shelf rights *vis-à-vis* another, *i.e.* the delimitation, is to be derived from a balance between the equal rights of both States, in accordance with equitable principles and relevant circumstances in order to arrive at an equitable solution. International jurisprudence has developed a common procedural approach[33] and achieved also a certain degree of consistency in the principles applied to a delimitation although it is less clear on how exactly these principles translate into the specific solution arrived at each case. This section will attempt to identify some of those principles and circumstances for maritime delimitation in the Aegean in so far as the effects of islands are concerned from a geographical point of view.

On the Area of Overlapping Title

In order for the question of delimitation to arise there must be an area where both States have legally valid title. Greece seems to deny the presence of any rights to continental shelf of Turkish coast, *i.e.* its title, beyond the median line between the islands and Turkish coast when it sought to confine the dispute only to the "continental shelf adjacent to the said Islands and … not concern[ing] any other part of the Aegean Sea or seabed thereof".[34] Thus the question may be formulated as "do the presence of Greek islands in front of the Turkish coast prevent the Turkish coast to generate entitlement to the west of the islands?" The award in the *Anglo-French Arbitration* found that the projection generated by the coast of France behind the Channel Islands was not severed by the presence of the British islands and extended beyond those islands.[35] The delimitation decided in the *St. Pierre and Miquelon Arbitration* acknowledges the capacity of the Newfoundland coast behind the islands of St. Pierre and Miquelon to generate maritime zones. The reason that Canada has maritime area seaward of the islands in the western sector and in the southeast portion of the second sector is certainly that the coast masked by foreign islands still posess capacity to generate maritime zones[36]. That coast in this case is the

[32] *Anglo- French Arbitration, supra* note 15, para. 146.
[33] CHARNEY, Jonathan I., "Progress in International Maritime Boundary Delimitation Law", *88 American Journal of International Law 227 (1994)*, p.234
[34] Application Instituting Proceedeings Submitted by the Government of Greece, para. 31, *ICJ Pleadings, Aegean Sea Continental Shelf*, p. 10
[35] *Anglo- French Arbitration, supra* note 15, para. 192.
[36] That this is the case in any event, notwithstanding the Court's exclusion of parts of the Newfoundland laying behind St. Pierre and Miquelon from the calculation of

Newfoundland coast directly behind St. Pierre and Miquelon and not another part because the Court considered that the Newfoundland coast projected frontally southwards, as did the coast of Nova Scotia.[37]

Significantly, The ICJ has also acknowledged the validity of claims in the area of overlapping entitlements which it defined as an "overlap between the areas which each State would have been able to claim had it not been for the presence of the other State".[38]

The conclusion from the foregoing is that -whatever the arguments relating to the basis of title may be- international law regarding the continental shelf permits a mainland coast masked by foreign islands to have valid claim to continental shelf areas beyond those islands.[39] Once the presence of overlapping titles is ascertained, the law of maritime delimitation examined in section II makes clear that in this area -which is the Aegean Sea, not only the area between the easternmost Greek islands and the Turkish coast - the *extent* of the title in relation to the neighbouring State will depend not solely on basis of title, but on "the relevant weight to be accorded to different considerations in each case … [by] consult[ing] the circumstance of the case"[40] and in this sense, presence of islands may well constitute relevant circumstances to be taken into account in order to reach an equitable result.

A word of caution is needed when dealing with issues of entitlement in the Aegean. The number of Greek islands in the Aegean are given in the several thousands.[41] It is questionable that *all* of these insular formations are even *entitled* to continental shelf. As the UNCLOS, to which Greece is a party, states in article 121 paragraph 3 "rocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf".[42]

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relevant coasts is criticized by Judge Gotlieb's Dissenting Opinion, 31 ILM 1145 (1992), pp. 1184-1185, para.s 18-25.

[37] *St. Pierre and Miquelon Arbitration*, *supra* note 21, para. 73.

[38] *Jan Mayen Case*, *supra* note 27, para. 59.

[39] In the same opinion: LAGONI, Rainer, "Overlapping Claims to Continental Shelf Areas", in *The Aegean Issues: Problem and Prospects*, 1989, Foreign Policy Institute, pp. 147-154, on pp. 151-152.

[40] *Jan Mayen Case*, *supra* note 27, para.58.

[41] The website of the Greek Ministry of Foreign Affairs gives this number as "nearly 3000" (*http://www.mfa.gr/foreign/bilateral/aegeen.htm*, visited on 12.04.2000). Roucounas cites an exact number of 3200 (ROUCOUNAS, Emmanuel, "Greece and the Law of the Sea" in *The Law of the Sea- The European Union and its Member States*, Tullio Treves (ed.), 1997, pp. 225-259, on p. 226). A more modest number is quoted by Rozakis as "islands whose number, together with islets and rocks, comes close to 2000" (ROZAKIS, Christos L., "The Greek Continental Shelf" in *Greece and the Law of the Sea*, Theodore C. Kariotis (ed.), 1997, pp.69-113, on p.72).

[42] The principle that small, uninhabited islets and rocks do not generate maritime zones unless they form a "portico" of the mainland is not a novelty of UNCLOS as can be seen in the examples given by L. F. E. GOLDIE in "The International Court

On the Relevant Coasts

Not only have the courts developed a consistent pattern in beginning the analysis of a delimitation dispute by identification of the relevant area and coastline[43], as has been declared by the ICJ "the coast of each of the Parties … constitutes the starting point from which one has to set out in order to ascertain how far the submarine areas appertaining to each of them extend in a seaward direction, as well as in relation to neighbouring States"[44]. The coastal configuration and the relationship between those coasts, in each case has affected the equitable principles applied and the methods used. Moreover, the length of the relevant coast is the basis of assessment of proportionality, employed to test the equitable character of the delimitation. As geographical considerations became dominant in delimitation cases, it is especially important to examine the role of islands in defining the relevant coasts and setting up the geographical context for delimitation in the Aegean.

On this aspect, the Greek position, implied by the restriction of the relevant area to between easternmost Greek islands and the Anatolian coast, is that the east Aegean islands are considered to be the coast of Greece which generate the natural prolongation of the Greek territory that overlaps with that of Turkey, in a relationship of oppositeness. [45] In the *Anglo-French Arbitration*, the Court was faced with a similar question. To answer how the presence of Channel Islands close to the coasts of France would effect the median, the Court had to "first determine whether the Channel Islands should be considered to be a projection, as it were from the United Kingdom's mainland which constitutes its 'opposite' coast *vis-à-vis* France in this region." If the answer was in the affirmative, the median (which both Parties agreed was the appropriate method) "would automatically deviate southwards in a long loop around the Channel Islands".[46] The Court found this interpretation to be "extravagant legally as it manifestly is geographically". The matter was then treated under special circumstances, *i.e.* that "there may be difference in treatment of islands by reason of their geographical situations, size and importance".

It may be speculated that Greece would claim that it is a case of numerous islands linked "with the Greek mainland through other chains of islands in the Aegean, the whole forming a uniform maritime front in the area of delimitation."[47] Forming a fictious coastline using the the Aegean islands would be contrary to

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of Justice's 'Natural Prolongation' and the Continental Shelf Problem of Islands", *4 Netherlands Yearbook of International Law 237 (1973)*, on pp. 247-250, 258-259.

[43] CHARNEY, *supra* note 33, p. 234.

[44] *Case Concerning the Continental Shelf (Tunisia/Libyan Arab Jamahiriya), Judgment, ICJ Reports1982*, p.18 (hereinafter *Tunisia/ Libya Case*), para. 73.

[45] Application Instituting Proceedeings Submitted by the Government of Greece, para. 31, *ICJ Pleadings, Aegean Sea Continental Shelf*, p. 10, para. 29(2).

[46] *Anglo-French Arbitration, supra* note 15, para.189.

[47] ROZAKIS, *supra* note 41, p.101

principles enunciated in international decisions. First, in the *Anglo-French Arbitration* the Court emphasized that it "must clearly have regard to the region as a whole and to its relation with the rest of the arbitration area"[48] when dealing with the Channel Islands which were treated "only as islands of the United Kingdom, not as semi-independent States."[49] In the *Libya/Malta Case* where the character of the relavant area as semi-enclosed sea was emphasized, the ICJ held that "it is the coastal relationships in the whole geographical context that are to be taken into account of and respected."[50] Thus, islands in an area where their parent State's mainland territory is also abutting on cannot be assessed in detachment from that geographical fact and the coastline of the State will be evaluated in this general context.

The relationship of islands to the "coastline" was deliberated on by the Arbitration Tribunal in the 1985 *Case Concerning the Delimitation of the Maritime Boundary Between Guinea and Guinea-Bissau*[51] (hereinafter *Guinea/ Guinea Bissau Arbitration*) "to determine the extent to which these [islands] should be taken into account for delimitation purposes". The Tribunal distinguished between three types of islands: islands separated from the continent by narrow channels and often joined to it at low tide, the Bijagos Islands, a cluster the nearest of which is two nm from the continent and no two of which are more than five nm apart and finally islands scattered further south, some of which may be taken into account for the establishment of baselines and be included in the territorial waters. Then it judged only the first two categories to be "relevant" in its consideration of the coastline.[52] A similar reasoning guided the Tribunal in the arbitration between Yemen and Eritrea as it examined the Dahlak group of islands on the Eritrean side and the island of Kamaran on the Yemeni side of the coast. These were considered to form "integral" parts of the coasts of their parent States, being so closely linked with the mainland that the waters landward are internal waters.[53] On the other hand, the island of Jabal al-Tayr and the Zubayr group, all "mid-sea islands" were held to "not constitute a part of Yemen's mainland coast"[54] thus "the requirement of an equitable result" raised the question of their effect to be decided on the basis of "their size, importance and like considerations in the *general geographical context*".[55] Obviously, there is no probability of the Greek islands to form such an integral fringe of the mainland so as to form the uniform front constituting the relevant coast for the delimitation of the continental shelf, nor is it possible to consider them as constituting a general direction of coastline.

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[48] *Anglo-French Arbitration*, *supra* note 15, para. 145.
[49] *Ibid.*, para.186.
[50] *Libya/Malta Case*, *supra* note 17, para. 47.
[51] 25 ILM 252 (1986)
[52] *Ibid.*, para. 95.
[53] *Eritrea/ Yemen Arbitration*, *supra* note 30, para.s 139 and 150.
[54] *Ibid*., para. 147.
[55] *Ibid*., para.117 (emphasis added).

What is not possible geographically cannot be accomplished by construction of strraight baselines enclosing these islands. Courts have been careful to distinguish the baseline considerations from their evaluation of geographical circumstances.of the cases before them. In the *Tunisia/Libya Case* the ICJ refused to consider the Tunisian straight baseline across Gulf of Gabes in the context of proportionality between appertaining continental shelf areas and coastlengths because "the element of proportionality is related to lengths of the coasts of the States concerned, not to straight baselines drawn round those coasts."[56] Neither are the baselines considered to be relevant *per se* for the calculation of the area of continental shelf appertaining to a State.[57]

This emphasis on the need for correct interpretation of geographical circumstances of the Aegean should not however obscure that "geographical facts do not, in themselves, determine the line to be drawn. Rules of international law, as well as equitable principles, must be applied to determine the relevance and weight of the geographical features."[58]

As Relevant Circumstances

Notwithstanding the failure of conventional rules to endorse deviations from a generally-stated rule regarding delimitation of maritime zones for enclosed or semi-enclosed seas or for cases involving islands, State practice and legal theory has always accepted that the effect of islands will vary.[59] Maritime boundary delimitation cases also demonstrate a similar approach.

The presence of the Channel Islands, "on the wrong side" and "detached geographically from the United Kingdom" were held to be a circumstance creative of inequity and a special circumstance within the meaning of article 6 of the Geneva Convention on the Continental Shelf, "disturb[ing] the balance of the geographical circumstances which would otherwise exist between the Parties in this region as a result of the broad equality of the coastlines of the mainlands" in the *Anglo-French Arbitration*,[60] hence were enclaved within French side of the mainland median. This situation is reminiscent of the Greek islands especially in the mid and north Aegean. All the more so, bearing in mind that the Court noted that "the extent of the continental shelf is comparatively modest and the scope for adjusting the equities correspondingly small".[61]

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[56] *Tunisia/Libya Case*, *supra* note 44, para. 104.
[57] *Libya/Malta Case*, *supra* note 17, para. 64. See also Guinea/ Guinea Bissau Arbitration para.96.
[58] *St. Pierre and Miquelon Arbitration*, *supra* note 21, para. 24.
[59] WEIL, Prosper, *The Law of Maritime Delimitation- Reflections*, 1989, Grotius, p.229.
[60] *Anglo-French Arbitration*, *supra* note 15, para.s 199, 197 and 183.
[61] *Ibid*., para. 201.

On the other hand, the French islands of St. Pierre and Miquelon, also laying close to the coast of another State, Canada, were only partially enclaved. The reason for this difference also has some relevance for the Aegean. One difference is that the English Channel is a narrow body of waters, whereas the open waters of the Atlantic to the east of St. Pierre and Miquelon provided for "more scope of edressing inequities"[62] The second difference relates to the position of the islands in the general geographical context of the relevant area: St. Pierre and Miquelon constitute the sole coast of France in the relevant area that generate rights in the relevant area, whereas "because of the proximity of the English coast" the delimitation involving the Channel Islands becomes one of "delimitation between States, whose coastlines are in *an approximately equal relation to the continental shelf to be delimited*".[63]. Therefore, the islands of St. Pierre and Miquelon did not pose a problem of inequity between two States of equal relationship to continental shelf in a semi-enclosed sea, but they posed other problems of encroachment and cut-off effect that still needed to be balanced against the rivalling mainland, thus curtailing the zone they could have created under strict equidistance.[64] This result sustains rather than puts an end to the character of islands as special circumstances, especially as circumstances creating, in semi-enclosed seas like the Aegean where there is no unobstructed coastal opening of the islands, inequities that need to be addressed to achieve an equitable delimitation. The difference is in the methods rather than the principles.

Another case where the islands as well as the mainland territory of a state involved is the *Tunisia/ Libya Case*. The Kerkennah Islands, measuring 180 square kilometres in area and about 11 miles from the coast, were considered as a relevant circumstance for the delimitation but were only granted half effect so as not to give excessive weight to them.[65] The island of Jerba, an inhabited island of considerable size, was both disregarded in assessing the general direction of the coastline and did not effect the construction of the boundary at all, as other considerations were held to be prevailing over the effect of Jerba's presence in the part it would be relevant.[66] These other considerations were related to the conduct of the parties in so far as it amounted to an indication of what the Parties themselves may have considered equitable.[67] This approach of inquiring into the prior conduct of the Parties has been pursued also in subsequent cases, evidencing the importance attached to stability and

[62] *Ibid*., para. 200. Note that it was only in this area where the Court of Arbitration between Canada and France determined St. Pierre and Miquelon had a coastal opening that the islands were awarded the full 200 nm zone (para. 70).
[63] *St. Pierre and Miquelon Arbitration*, *supra* note 21, para. 42 and *Anglo-French Arbitration*, *supra* note 15, para. 200 respectively. Emphasis added.
[64] See *supra* notes 22-23 and accompanying text
[65] *Tunisia/ Libya Case*, *supra* note 44, para. 128-129.
[66] *Ibid.*, para.s 120 and 79.
[67] *Ibid.*, para.s 117-120.

the *status quo* in maritime boundary delimitations[68], which might override geographical considerations as the *Tunisia/ Libya Case* has shown.[69]

The Bijagos Islands, near the coast of its parent State, used by the Tribunal to determine the convex configuration of the coastline, also did not have further effect on the boundary which was drawn as a perpendicular to the simplified coastline.[70]

Although the *Libya/ Malta Case* dealt with the case of an island State, it provides valuable guidence for an assessment of the effect of islands in the Aegean: The coast of Malta was not only evaluated in its relationship with the Libyan coast but also in its location in the general geographical context of central Mediterranean was held to be a pertinent circumstance to be taken into account for delimitation.[71] The requirement of weighing the effect of mid-sea islands in the general geographical context was reiterated in the *Eritrea- Yemen Arbitration.*[72]

The islands in the Red Sea where "Yemen and Eritrea face one another acrossa relatively narrow compass"[73] exemplify the diversity of circumstances that they may create in a delimitation. The islands forming an integral part of mainlands of the Parties were used to calculate the mainland median line. The mid-sea islands of Jabal al-Tayr and the Zubayr group, not being part of the mainland had no effect on the boundary in view of "their barren and inhospitable nature and their position well out to the sea".[74] The Zuqar and Hanish groups of islands belonging to Yemen were used to compute the median in the middle strech of the boundary, however it must be noted that there was the advantage of the presence of Eritrean islands of the Mohabbakahs, the Haycocks and the South West Rocks that were correspondingly used as basepoints. This trade-off also avoided Eritrea's being faced with the exercise of Yemeni rights in the immediate vicinity of its coast.[75]

The examination above demonstrate that the courts dealt with the presence of islands in a delimitation area in a variety of methods. What is unvarying is that the requirement of the fundamental norm to reach an equitable solution has been upheld to necessitate an examination of the effect islands involved as they may affect the equity of that specific case. This practice reinforces the role of "the

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[68] CHARNEY, *supra* note 33, pp. 234-236.

[69] On the *status quo* in the Aegean see, GÜNDÜZ, Aslan, "A Tentative Proposal for Dealing with the Aegean Disputes", in *Proceedings of the International Symposium "The Aegean Sea, 2000"*, Bayram Öztürk (ed.), 2000, pp. 139-151.

[70] *Guinea/ Guinea Bissau Arbitration*, *supra* note 51, para.111.

[71] *Libya/ Malta Case*, *supra* note 17, para. 69 and also para. 53.

[72] *Eritrea/ Yemen Arbitration*, *supra* note 30, para. 117.

[73] *Ibid.*, para.85

[74] *Ibid.*, para. 147-148.

[75] *Ibid.*, para.s 154-158. Note also that the security of the coast which the Tribunal was concerned about is the security of the Eritrean mainland. Although the islands of the Zuqar- Hanish group constitute parts of Yemen's territory, the boundary close to them were not considered to give rise to similar concerns over security.

regional factor" rather than "the strict application of a global rule" when the situation is one of the presence of islands in a semi-enclosed sea.[76]

On Equity and Proportionality

While proportionality between the length of coast measured in its general direction and the continental shelf appertaining to it is not a method of delimitation in its own right, substantial disproportion may constitute a relevant circumstance or one calling for appropriate correction of a line derived from the application of any method[77]. Most important is its role as the ultimate test of whether the delimitation achieved is equitable or not. Although the determination of the length of the coasts and of the areas appertaining to each Party in the Aegean would require a study of its own, it is still possible to assess the equity or otherwise of the proposed delimitations in the Aegean even without going into "nice calculations" as there is a minimum standard that can be used: That the delimitation should not be result in disproportion rather than the attaining a mathematical proportionality.[78] A delimitation of the continental shelf in the Aegean Sea using a median line between the easternmost Greek islands and the Turkish coast would obviously be manifestly disproportionate.

This median proposed by Greece not only fails the proportionality test of equity, it also does not lead to a result that is equitable in itself. In the *Jan Mayen Case*, the ICJ rejected a solution which would have been more equitable from a mathematical perspective but not equitable in itself because it would have left Norway with merely the residual part of the relevant area.[79] Similarly a delimitation in the Aegean Sea- where the relevant area for delimitation is not restricted to the portion east of the Greek islands- that does not address the equal entitlement of the Turkish coasts cannot be regarded as equitable in itself. As far as the Aegean islands are concerned it has already been mentioned that they do not constitute the sole coast of Greece that is relevant to the delimitation dispute in the Aegean. This is the differentiating circumstance between the Aegean islands and the Jan Mayen island which was the only coast of Norway generating maritime zones in the relevant area. As both Turkey and Greece are States abutting on the same continental shelf with coastlines in equal relation to that shelf, the equity of the result is to be sought in that relationship.

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[76] NELSON, L. D. M., "The Emerging New Law of the Sea", *42 The Modern Law Review 42 (1979)*, on p. 58.
[77] *Case Concerning Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada/ United States of America), ICJ Reports, 1984, p.246*, para.s 184-185.
[78] *Anglo- French Arbitration, supra* note 15, para.s 101, 250; *Libya/ Malta Case, supra* note 17, para. 75; *Eritrea- Yemen Arbitration, supra* note 30, para. 165.
[79] *Jan Mayen Case, supra* note 27, para. 70.

CONCLUSION

The unique politico-geography of the Aegean poses some very complex problems for the delimitation of the continental shelf. The dispute has concentrated around the issues of entitlement, argued in two diagonally opposed directions. Delimitation, on the other hand, is effected by the operation of related but nevertheless distinct set of international rules, calling for the application of equitable principles to all the relevant circumstances with the aim of achieving an equitable delimitation. While the operation of equitable principles is not confined to geographical considerations,[80] it is essential to assess the particular geographical circumstances of the case - presence and location of the islands- appropriately. Such an assessment would also pave the way for meaningful negotiations for delimitation by agreement between the Parties, which is the primary means of continental shelf delimitation as required by The fundamental rule itself.

[80] On the relevance of especially the security interests and the 1923 *Lauseanne Treaty of Peace* to the delimitation in the Aegean see TOLUNER, *supra* note 1, pp. 566-567, 577-579.

THE INTERCONNECTED AEGEAN SEA DISPUTES

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INTRODUCTION

The disputes between Turkey and Greece in the Aegean Sea have festered for many years, blocking amicable relations between the two neighbors. The two countries even disagree about how many separate controversies are truly "in dispute." Greece has taken the position that the delimitation of the continental shelf is the only unresolved issue,[1] but Turkey contends that questions of sovereignty over certain islands, the demilitarized status of other islands, the breadth of the territorial sea around Greece's Aegean islands, the air defense zones around Greece's islands, the control of air traffic over the Aegean, and rights of passage through the Aegean are also in need of resolution. The Cyprus controversy also haunts relationships between Greece and Turkey, as do feelings on each side of the Aegean that the other nation has engaged in oppression and abuses in the past and harbors expansionist plans for the future.[2] This paper explores the Aegean issues (as Turkey defines them), examines the extent to which they can be viewed separately or must be examined and resolved as a package, outlines the relevant principles of international law, and offers some suggestions for resolution.

Sovereignty Over Disputed Islands

Sovereignty disputes exist as a result of ambiguous language in the governing treaties, and also because certain small islands do not appear to have been mentioned by any treaty. The Ottoman Empire ceded Crete and the eastern Aegean islands of Lemnos, Samothrace, Lesvos (Mytilini), Chios, Samos, and Ikaria (Nikaria) to Greece in the Treaty of London of 17/30 May 1913.[3] This action was confirmed by the Great Powers of Europe in the Treaty of Athens of Nov. 1-14, 1913, which was communicated to Greece on February 13, 1914 (and is usually referred to as the 1914 Decision).[4]

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[1] *See, e.g.,* Byron Theodoropoulos, *The So-Called Aegean Dispute: What Are the Stakes: What Is the Cost?* in *Greece and the Law of the Sea* 325, 327 (Theodore C. Kariotis ed. 1997): "In the case of the Aegean there is only one claimant party, namely Turkey, while Greece claiming nothing, is reduced to fending off an ever increasing number of Turkish claims."

[2] *See, e.g.,* Aslan Gunduz, *A Tentative Proposal for Dealing with the Aegean Disputes*, in *The Aegean Sea 2000* at 139-51 (Bayram Ozturk ed. 2000).

[3] 107 British and Foreign State Papers 656.

[4] *Id.* at 893.

Greek sovereignty over these six eastern Aegean islands was affirmed again in Article 12 of the Lausanne Peace Treaty of July 24, 1923,[5] which also recognized Turkish sovereignty over the northeastern Aegean islands of Imbros (Gokceada), Tenados (Bozcaada), and Rabbit Islands. Article 6 of this treaty says that "In the absence of provisions to the contrary, in the present Treaty, islands and islets lying within three miles of the coast are included within the frontier of the coastal State." The second paragraph of Article 12 restates this general statement by saying that "Except where a provision to the contrary is contained in the present Treaty, the islands situated at less than three miles from the Asiatic coast remain under Turkish sovereignty." Then, Article 16 addresses these issues once again, but in a more dramatic and decisive fashion, saying that "Turkey hereby renounces all rights and title whatsoever over or respecting the territories situated outside the frontiers laid down in the present Treaty and the islands other than those over which her sovereignty is recognised by the said Treaty, the future of these territories and islands being settled or to be settled by the parties concerned."[6]

Sovereignty over the Dodecanese Islands is addressed in Article 15, which says that:

> Turkey renounces in favour of Italy all rights and title over the following islands: Stamalia (Astrapalia), Rhodes (Rhodos), Calki (Kharki), Scarpanto, Casos (Casso), Piscopis (Tilos), Misiros (Nisyros), Calimnos (Kalymnos), Leros, Patmos, Lipsos (Lipso), Simi (Symi), and Cos (Kos), which are now occupied by Italy, and the islets dependent thereon, and also over the island of Castellorizzo (see Map No. 2)."

Fourteen islands and "the islets dependent thereon" are thereby ceded to Italy.

The next important event was the Italian-Turkish Treaty of 1932 (often called the Ankara Agreement),[7] which was designed to resolve the dispute over the maritime boundary between the tiny Mediterranean islet of Castellorizo (then held by Italy) and the Turkish coast, which had been submitted in 1929 to the Permanent Court of International Justice. At the same time that the Castellorizo boundary was being resolved, letters were also exchanged (on January 4, 1932) saying that the countries agreed that a technical committee should be formed to delimit the maritime boundary between the Dodecanese Islands (then also controlled by Italy) and the

[5] 28 L.N.T.S. 21-23 (1924).

[6] This final phrase appears to refer in part to the Boundary Commission established in Article 5 of the Lausanne Treaty, which had the responsibility to define the detailed land division, but it is also drafted in general terms because Ottoman territory in other regions was also covered by Turkey's renunciation in Article 16. *See, e.g.*, the *Eritrea-Yemen* Arbitration (1998-99), discussed below.

[7] The Italian-Turkish Treaty of 1932 ("The Ankara Agreement"), signed on January 4, 1932, entered into force on May 10, 1933.

Turkish coast. These discussions led to a proces verbal signed by representatives of Turkey and Italy in Ankara on December 28, 1932, which delimited this boundary by fixing 37 pairs of reference points. This proces verbal also addressed remaining sovereignty disputes, and referred to the "Kardak islets" as belonging to Italy, with the territorial waters boundary between Italy and Turkey being the median line between the Kardak rocks and "Kato I (Anatolia)." This December 28, 1932 proces verbal was initialed by the negotiators representing the two countries, but it was never ratified by the Turkish Grand National Assembly (even though the Ankara Agreement itself was ratified by the Assembly on Jan. 14, 1933), and it was never registered with the League of Nations. Turkey views the December 1932 proces verbal as the record of a meeting of technicians, without the force of law, because it was never approved by Turkey's legislature. But Greece argues that it has the force of law, as a supplemental agreement interpreting the main Ankara Agreement.

The final document of importance to these issues is the Paris Treaty of Peace between the Allied Powers and Italy of February 10, 1947.[8] Greece was a party to this treaty to resolve World War II disputes, but Turkey was not. In Article 14(1), Italy ceded title over the Dodecanese Islands to Greece, listing 14 named islands -- Batnoz, Lipso, Leros, Kalimnos, Kos, Bisiros, Simi, Tilos, Kalki, Rhodes, Karpatos, Kasos, and Astipalaia, as well as the Mediterranean islet of Castellorizo -- and also referring to their "adjacent islets."

These documents are clear in their major provisions, but leave some matters in doubt, including how one should define "adjacent" or "dependent" islands as those terms are used in the agreements. With regard to the Kardak/Imia Rocks dispute, which flared after December 25, 1995 when the Turkish bulk carrier *Figen Akat* ran aground on it, Greece argues that these two small barren rocks (one is reputed to be 2.5 hectares and the other is said to be 1.5 hectares) are "dependent" islands of Kalimnos, because Karkak/Imia is 5.5 nautical miles from Kalimnos (and is 1.9 miles southeast of the Greek-claimed islet of Kalolimnos).[9] Turkey argues on the other hand that Karkak/Imia is not covered by any of the treaties that transferred islands, and should belong to Turkey because it is only 3.8 nautical miles from the Turkish coast and is thus closer to (or more "adjacent") to Turkey than it is to any Greek island named in any of the treaties.

Supporters of Turkey's claim also point out that a "title deed of the rocks are registered on the Karakaya village of Bodrum prefecturate, Mugla province," that "[f]or years Turkish fishermen have engaged in fishing activities around these rocks without any problem," and that "Turkish ships have navigated freely through the waters surrounding them."[10] Greek writers, in contrast, point out that the islets are

[8] 49 U.N.T.S. 126 (1950).

[9] Krateros M. Ioannou, *The Greek Territorial Sea*, in *Greece and the Law of the Sea* 115, 140 (Theodore C. Kariotis ed. 1997).

[10] Anna Lucia Valvo, *The Aegean Sea Between Greece and Turkey: the Kardak Rocks and the Other Islands Never Given*, in *The Aegean Sea 2000* at 117, 117 (Bayram Ozturk ed. 2000).

within the Greek administrative district of Kaliminos,[11] and assert that, although both Kardak/Imia rocks are uninhabited, "for a long time Greek shepherds from Kalymnos have been bringing their goats for graze."[12]

Another type of dispute exists with regard to the islets of Gavdos and Gavdopula, which are situated about 30 km south of the western portion of Crete**.** Turkey's claim for these islets rests on the fact that they were once within the sovereignty of the Ottoman Empire, and are not explicitly mentioned in any treaty in which the Ottoman Empire ceded islands. Greece rests its claim to Gavdos and Gavdopula on its exercise of authority over these islets during most of the twentieth century, Turkish acquiescence to Greek authority, and the contiguity of these islets to Crete as "dependent" or "adjacent" islets.[13]

In 1898, when the Ottoman army withdrew, Crete declared itself to be an autonomous state, under the control of the Great Powers, and included its "adjacent islets" in its definition of its newly autonomous self.[14] As a formal matter, the Ottoman Empire ceded Crete to Greece in the 1913 Treaty of London, but that treaty made no mention of tiny Gavdos and Gavdopula. The 1913 Treaty authorized the six Great Powers (Germany, Austria-Bohemia, Russia, Italy, France, and the United Kingdom) to determine the future status of other Aegean Islands, but Gavdos and Gavdopula are not thought of as Aegean Islands, because of their location south of Crete.

On February 13, 1914, the Great Powers ruled that those Aegean Islands under Greek occupation, with the exception of Gokceada (Imbros) and Bozcaada (Tenedos**)** (near the entrance to the Dardenelles) and Meis (Castellorizo, Megisti)(off the Turkish Mediterranean coast near the town of Kas) would be formally ceded to Greece. Gavdos and Gavdopula were not occupied by Greece at the time of this determination, and on May 30, 1996, the Turkish General Staff opposed the inclusion of Gavdos in a NATO military exercise "due to its disputed status of property." Greece presently exercises administrative control over these two islets.

The Turkish position on sovereignty over the unnamed islets was summarized by one scholar as follows:

> An assumption that Turkish sovereignty over the islands beyond three miles from Anatolia has terminated, is inconsistent with the

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[11] Ioannou, *supra* note 9, at 143.

[12] *Id.* at 140.

[13] *See* David S. Saltzman, *A Legal Survey of the Aegean Issues of Dispute and Prospects for a Non-Judicial Multidisciplinary Solution*, in *The Aegean Sea 2000* at 179, 182 (Bayram Ozturk ed. 2000). Turkey denies that it has "acquiesced," and has in recent years protested any NATO activity on the islets because of their disputed status. *Id* at 182 n. 58.

[14] *See* Ioannou, *supra* note 9, at 151 n.53 (quoting Article 1 of the 1899 Cretan Constitution as saying that "L'ile de Crete avec les ilot adjacent constitue un Etat...").

> text and spirit of Lausanne Peace Treaty, with the interpretation of treaties in general and with the rules of international law requiring explicit declaration of consent for the cession of territorial sovereignty. Such a conclusion is also incompatible with the rationale of that principle within the context of Lausanne Peace Treaty.[15]

The Governing Law on Obtaining Sovereignty Over Isolated Islets.[16] Although the governing documents reviewed above will provide the primary sources for resolving the islet sovereignty disputes between Greece and Turkey, where such documents fail to provide answers, guidance may be provided from the decisions of international tribunals that have adjudicated similar disputes in the past.[17] In all these cases, the decisionmakers tend to ignore ancient historical claims and look instead at evidence of actual occupation and administration of the islets during recent times, generally focusing only on the last 100 years.

The *Palmas Island* dispute was between the United States (which, as the colonial power then governing the Philippine Islands, succeeded to the claim of Spain) and the Netherlands (the colonial power governing Indonesia). The United States based its claim on Spain's earlier "discovery" and the island's "contiguity" or proximity to the main Philippine islands. The Netherlands invoked its contact with the region

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[15] Ali Kurumahmut, A New Greek-Turkish Dispute: Who Owns the Rocks? in The Aegean Sea 2000 109, 112 (Bayram Ozturk ed. 2000)

[16] For a more complete discussion of some of the material that follows, see Mark J. Valencia, Jon M. Van Dyke, and Noel A. Ludwig, Sharing the Resources of the South China Sea 17-20 (1997).

[17] Among the decisions that provide guidance regarding the rules that govern the ability of a nation to claim ownership of isolated uninhabited island features are the Arbitral Award of His Majesty the King of Italy on the Subject of the Difference Relative to the Sovereignty over Clipperton Island (France v. Mexico), Jan. 28, 1931, 26 Am. J. Int'l L. 390 (1932), the Arbitral Award Rendered in Conformity with the Special Agreement Concluded on January 23, 1925, Between the United States of America and the Netherlands Relating to the Arbitration of Differences Respecting Sovereignty over the Island of Palmas (Miangas), 2 R.I.A.A. 829 (April 4, 1928), reprinted in 22 Am. J. Int'l L. 867, 909 (1928) [hereafter cited as Palmas arbitration], the decisions by the International Court of Justice (ICJ) in the Minquiers and Ecrehos Case (France/United Kingdom), 1953 I.C.J. 47, and the Land, Island and Maritime Frontier Dispute (El Salvador/Honduras; Nicaragua intervening), 1992 I.C.J. 351 [hereafter cited as Gulf of Fonseca case], and the more recent decisions in the Eritrea-Yemen Arbitration, <http://www.pca-cpa.org>. and the Qatar-BahrainCase, <http://www.icj-cij.org/icjwww/idocket/iq...ment_20010316/iqb_ijudgment_20010316.htm>

and its agreements with native princes. Judge Max Huber, the sole arbitrator,[18] favored the Dutch, based on their peaceful and continuous display of authority over Palmas. In language subsequently quoted in the *Eritrea-Yemen* Arbitration,[19] Judge Huber says: "It is quite natural that the establishment of sovereignty may be the outcome of a slow evolution, of a progressive intensification of State control."[20] Spain's "discovery" did not confer title because it was not accompanied by any subsequent occupation or attempts to exercise sovereignty. Judge Huber also rejected the U.S. claim based on "contiguity," concluding that international law does not support such a principle.[21]

The International Court of Justice addressed these issues in 1953 in the *Minquiers and Ecrehos* case.[22] Both France and the United Kingdom claimed title to a groups of islets and rocks between the British island of Jersey and the coast of France.[23] Each party produced ancient historical titles from the Middle Ages, but the Court found these materials to be inconclusive[24] and instead focused on actual displays of authority during the nineteenth and twentieth centuries.[25] The *Eritrea-Yemen* Tribunal later summarized the *Minquiers and Ecrehos* decision by saying that even though "there had also been much argument about claims to very ancient titles, it is the relatively recent history of use and possession that ultimately proved to be a main basis of the Tribunal decisions."[26] Based on this recent evidence, the International Court of Justice determined that the United Kingdom had exercised state functions over the features,[27] and that France had not established any similar

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[18] Judge Huber was at the time the President of the Permanent Court of International Justice.

[19] 1998 Award, para. 104.

[20] 2 R.I.A.A. 829 at 867 (1928).

[21] *Id.* at 893-94.

[22] Minquiers and Ecrehos case, supra note 17.

[23] Each group contains "two or three habitable islets, many smaller islets and a great number of rocks." 1953 I.C.J. at 53.

[24] The Court noted that "even if the Kings of France did have an original feudal title" to the adjacent Channel Islands, "such a title must have lapsed as a consequence of the events of the year 1204 and following years." Id. at 56. "To revive its legal force to-day by attributing legal effects to it after an interval of more than seven centuries seems to lead far beyond any reasonable application of legal considerations." Id. at 57.

[25] "What is of decisive importance, in the opinion of the Court, is not indirect presumptions deduced from events in the Middle Ages, but the evidence which relates directly to the possession of the Ecrehos and Minquiers groups." Id. at 57 (emphasis added).

[26] *Eritrea-Yemen* arbitration, *supra* note 17, 1998 Award, para. 450.

[27] The United Kingdom submitted evidence that the Jersey courts had exercised criminal jurisdiction over the Ecrehos and Minquiers islets during the nineteenth and twentieth centuries, that the few habitable houses on the islets had been required to

assertions of authority during this period. The Court thus awarded title over all the islets to the United Kingdom.[28] The Court also relied for its decision on the view that the Minquiers group were a "dependency" of the Channel islands (Jersey and Guernsey) and thus should be subject to the same sovereign authority.[29]

The case of the *Land, Island and Maritime Frontier Dispute (El Salvador/Honduras; Nicaragua intervening),*[30] decided by a chamber of the International Court of Justice in 1992, involved a dispute over sovereign ownership of several small islands in the Gulf of Fonseca, which is located where the boundaries of El Salvador, Honduras, and Nicaragua meet. This area had been governed by a colonial power--Spain--until 1821 when the region became independent and established the Federal Republic of Central America.[31] This entity disintegrated in 1839, when the presently existing states of Honduras, El Salvador, Nicaragua, Costa Rica, and Guatemala were established.[32] The Chamber ruled that the Fonseca islands were not *terra nullius* at that time, but instead were inherited by the new entities from Spain. It then focused on which of the new countries occupied the islands, what actions indicated the exercise of authority over them, and to what extent the other states acquiesced in the exercise of authority.[33] The Chamber emphasized that it was not deciding whether occupation by one state over time could establish ownership in a case where a pre-existing title was held by another state.

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pay property taxes, that deeds conveying property had been registered in Jersey, that custom-houses had been established by Jersey officials in both islet groups, and that Jersey officials visited the islets on occasion to license boats, collect census data, and supervise construction of maritime safety facilities. 1953 I.C.J. at 65-66, 69.

[28] *Id.* at 53, 67, 72.

[29] *Id.* at 71.

[30] Gulf of Fonseca case, supra note 17.

[31] Id., 1992 I.C.J. at 380-81, para. 29, and 558, para. 333.

[32] Id. at 380-81, para. 29.

[33] The Chamber quoted, as what it described as "a classic dictum," the opinion of Judge Huber in the Island of Palmas case: "'practice, as well as doctrine, recognizes--though under different legal formulae and with certain differences as to the conditions required--that the continuous and peaceful display of territorial sovereignty (peaceful in relation to other States) is as good as a title' (United Nations, Reports of International Arbitral Awards, Vol. II, p. 839)." Id. at 563, para. 342.

The Chamber then went on to say with regard to the dispute before it:

Where the relevant administrative boundary was ill-defined or its position disputed, in the view of the Chamber the behaviour of the two newly independent States in the years following independence may well serve as a guide to where the boundary was, either in their shared view, or in the view acted on by one and acquiesced in by the other .... This aspect of the matter is of particular importance in relation to the status of the islands, by reason of their history.

Id. at 565, para. 345.

Instead, the Chamber made clear that it was relying upon occupation *and acquiescence* as evidence of the recognition by the states of the region regarding which country had proper title over each of the disputed islands when the evidence regarding a pre-existing title was ambiguous.[34]

Based on these principles, the Chamber awarded the island of El Tigre to Honduras because of its occupation of this island for more than 100 years, accompanied by some evidence of recognition by El Salvador that Honduras was authorized to exercise authority over the island.[35] The Chamber then turned to Meanguera Island (1586 hectares and long-inhabited) and Meanguerita Island (26 hectares and uninhabited, lacking fresh water).[36] The Chamber found evidence of occupation ("effective possession and control") of these islands by El Salvador since 1854, and found no effective protests by Honduras.[37] The Chamber's conclusion was thus that "Honduras was treated as having succeeded to Spanish sovereignty over El Tigre, and El Salvador to Spanish sovereignty over Meanguera and Meanguerita," with Meanguerita being viewed as an "appendage" to or "dependency" of Meanguera.[38]

The *Eritrea-Yemen* arbitration relied explicitly on the *Minquiers and Ecrehos* judgment for the proposition that it is the relatively recent history of use and possession of the islets that is most instructive in determining sovereignty, concluding that the historical-title claims offered by each side were not ultimately helpful in resolving the dispute.[39] The test utilized by the tribunal was described as follows:

The modern international law of acquisition (or attribution) of territory generally requires that there be: an intentional display of power and authority over the territory, by the exercise of jurisdiction and state functions, on a continuous and peaceful basis. The latter two criteria are tempered to suit the nature of the territory and the size of its population, if any.[40] The tribunal relied on evidence of public claims, legislative acts seeking to regulate activity on the islands, licensing of activities in the surrounding waters, enforcing fishing regulations, licensing tourist

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[34] *Id.* at 566, para. 347.
[35] *Id.* at 566-70, paras. 348-55.
[36] *Id.* at 570, para. 356.
[37] *Id.* at 570-79, paras. 356-68. Honduras made one protest in 1991, but the Chamber viewed this effort as untimely. *Id.* at 575-77, paras. 362-64. The Chamber also emphasized that Honduras should have protested a delimitation of the Gulf of Fonseca that had the effect of casting doubt on Honduras's claim of sovereignty over Meanguera. *Id.* at 577-78, paras. 365-66.
[38] *Id.* at 579, para. 368.
[39] 1998 Award, para. 450, citing *Minquiers and Ecrehos*, 1953 I.C.J. at 47. *See generally* Barbara Kwiatkowska, *The Future of Islands in the Light of the Eritrea/Yemen Awards* (paper presented to the SEAPOL Interregional Conference, Bangkok, March 21-23, 2001).
[40] *Eritrea-Yemen* arbitration, *supra* note 17, 1998 Award, para. 239.

activity, search and rescue operations, environmental protection, construction on the islands, and the exercising of criminal and civil jurisdiction on the islands.[41] The tribunal awarded the waterless, volcanic islets of the Zuqar-Hanish group to Yemen based on its greater showing "by way of [recent] presence and display of authority."[42] The tribunal also awarded to Yemen the lone island of Jabal al-Tayr and the al-Zubayr group, because Yemen's activities on these barren islands were greater, and they are located on the Yemen side of the median line between their uncontested land territories.[43]

The tribunal also gave some attention to geographical proximity or contiguity, utilizing the "presumption that any islands off one of the coasts may be thought to belong by appurtenance to that coast unless the State on the opposite coast has been able to demonstrate a clearly better title."[44] The Mohabbakahs and the Haycock Islands were thus awarded to Eritrea because they were mostly within 12 nautical miles of the Eritrean coast.[45] The tribunal also included at the end of its opinion the enigmatic, but perhaps important, statement that "Western ideas of territorial sovereignty are strange to peoples brought up in the Islamic tradition and familiar with notions of territory very different from those recognized in contemporary international law."[46]

The *Eritrea-Yemen* arbitration is also instructive to the Aegean disputes in another way, because it interprets and applies the same 1923 Lausanne Peace Treaty that is central to these controversies. The arbitral tribunal treated the Lausanne Treaty as having present meaning, and tended to interpret its provisions literally. With respect to Article 16, the tribunal said that none of the islands previously governed by the Ottoman Empire could be viewed as having a *res nullius* status after the treaty, because their status was said to be subject to being "settled by the parties concerned." For this reason, sovereignty over previously-Ottoman islands cannot be resolved by a single party "unilaterally...by means of acquisitive prescription."[47] Nonetheless, displays of authority might still be relevant for showing an understanding of the settlement that "the parties concerned" had reached.

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[41] *Id*., paras. 451-52.
[42] *Id.*, paras. 507-08.
[43] *Id.*, paras. 509-24.
[44] *Id*., para. 458.
[45] *Id.*, paras. 472, 476-80 (citing, among other things, Article 6 of the 1923 Lausanne Treaty to support the presumption that islands within territorial sea are under the same sovereignty as the nearby mainland).
[46] *Id.*, para. 525. At another point (paragraph 446), the tribunal said "there is the problem of the sheer anachronism of attempting to attribute to such a tribal, mountain and Muslim medieval society the modern Western concept of a sovereignty title, particularly with respect to uninhabited and barren islands used only occasionally by local, traditional fishermen."
[47] 1998 Award, para. 165. In Paragraph 445, the tribunal characterized the islands as being in "an objective state of indeterminancy."

How Do These Precedents Apply to the Aegean Islets? Discovery or a declaration of sovereignty or an ancient title may not always be sufficient to establish current title, and the decisionmakers usually focus on evidence of "effective occupation" during the past century of island features. Although the requirements for "discovery" of remote uninhabited islands (in a *terra nullius* status) may be less strict than for populated territories,[48] in cases of ambiguity and dispute a tribunal will look closely at evidence of occupation, exercise of authority, and acquiescence by other nations. Proximity to an adjacent larger land mass is frequently, but not always, decisive. Recognition by other countries is certainly relevant. Although abandonment cannot always be presumed by nonuse, especially if it is not voluntary,[49] tribunals will require effective exercise of authority in cases where evidence of discovery is disputed or ambiguous.

The disputed features in the Aegean, such as Kardak/Imia, tend to be small and remote, and in some cases no one has ever lived on them permanently or successfully exploited them economically. Efforts have been made by Turkish scholars to support the Turkish claim regarding the unnamed islets, such as Kardak/Imia, by a close explanations of the governing treaties,[50] but probably a stronger argument, at least for those islets near Turkey's shore, would be based on the expanded current notion of the territorial sea, as utilized by the *Eritrea-Yemen* tribunal. The 1923 Lausanne Peace Treaty was clear in allocating to Turkey those islets within three miles of Turkey's coast, a distance that must have been chosen because three nautical miles was the commonly-accepted width of the territorial sea at the time. Today, the width of the territorial sea has been extended -- to 12 nautical miles in most areas and to six nautical miles in the Aegean. The *Eritrea-Yemen* arbitral tribunal allocated all disputed islands within the territorial sea of either country to that adjacent country.[51] Turkey can thus contend that it should have sovereignty over those unnamed islets that are within its six-mile territorial sea, or, if its territorial sea is less because of an adjacent named Greek island, over those

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[48] The International Court of Justice agreed that less in the way of formal displays of sovereignty are required for uninhabited or thinly populated areas in the *Advisory Opinion on Western Sahara*, 1975 I.C.J. 12, 43 (1975).

[49] See Daniel J. Dzurek, Southeast Asian Offshore Oil Disputes, in Ocean Yearbook 11 at 157, 170 (1994).

[50] See, e.g., Sevin Toluner, Some Reflections on the Interrlation of the Aegean Sea Disputes, in The Aegean Sea 2000 at 121-26 (Bayram Ozturk ed. 2000).

[51] The Eritrea-Yemen arbitration, supra note 17, concluded that islets within 12 nautical miles of the Eritrean coast (utilizing the breadth of the territorial sea accepted for that region) belonged to Eritrea. 1998 Award, para. 472 (citing D.Bowett, The Legal Regime of Islands in International Law 48 (1978), and Lindley, The Acquisition and Government of Backward Territory in International Law 7 (1926), for the proposition that it is presumed that islands within territorial waters are under the sovereignty of the mainland state).

within the median or equidistance line drawn between uncontested Turkish and Greek territory. Under this approach, Kardak/Imia could be considered to be within Turkey's territorial sea, because it is closer to Turkey's coast than to the Greek island of Kalimnos.

Demilitarization of the Eastern Aegean Islands

The 1914 Decision confirmed that Greece would maintain sovereignty over the eastern Aegean islands of Samothrace, Lemnos, Lesvos (Mytilene), Chios, Samos, and Ikaria (Nikaria), but on the condition that they would not be fortified or utilized for naval or military purposes.[52] This cession is confirmed in Article 12 of the 1923 Lausanne Peace Treaty, and Article 13 of the 1923 Treaty expressly prohibited the militarization of Mytilene, Chios, Samos, and Nikaria.[53] This treaty does not mention Samothrace and Lemnos, but its companion treaty, entitled the Convention Relating to the Regime of the Straits,[54] which was signed at the same place and time, and was viewed as an integral part of the 1923 Peace Treaty, does in Article 4 establish a demilitarized status for Samothrace and Lemnos (as well as for the Turkish islands of Gokceada (Imbros), Bozcaada (Tenedos), and Rabbit Island).

Turkish and Greek scholars disagree on the impact of the Montreux Convention of 1936[55] on the demilitarized regime established in the 1923 Lausanne Straits Regime.[56] Lemnos and Samothrace are not specifically mentioned in the Montreux Convention. The Preamble to the Convention says that its signatories "resolved to replace" the 1923 Lausanne Straits Regime. The Protocol permits Turkish remilitarization of the shores of the Turkish Straits, and other language in

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[52] *See* Sevin Toluner, *The Pretended Right to Remilitarize the Island of Lemnos Does Not Exist (Limni Ada'sinin Hukuki Statusu ve Montreaux Bogazlar Konvansiyonu)* 71 (1987).

[53] Article 13 states: With a view to ensuring the maintenance of peace, the Greek Government undertakes to observe the following restrictions in the islands of Mytilene, Chios, Samos and Nikaria:

(1) No naval base and no fortification will be established in the said islands.

(2) (2) Greek military aircraft will be forbidden to fly over the territory of the Anatolian coast. Reciprocally, theTurkish Government will forbid their military aircraft to fly over the said islands.

(3) The Greek military forces in the said islands will be limited to the normal contingent called up for military reserves, which can be trained on the spot, as well as to a force of gendarmerie and police in proportion to the force of gendarmerie and police existing in the whole of the Greek territory.

[54] 28 L.N.T.S. 129 (1924).

[55] 173 L.N.T.S. 215 (1936).

[56] "Theories abound whether the Montreux Convention relieves Greece of the obligation to demilitarize." Saltzman, *supra* note 13, at 182.

the Preamble refers to "Turkish security and ... the security, in the Black Sea, of the riparian States..." But nothing in the Convention refers to Lemnos and Samothrace, so it is possible to argue that the "resolved to replace" language should be viewed restrictively, as applied only to the straits themselves, and that the Montreux Convention does not replace everything in the 1923 Lausanne Straits Regime.[57] Turkish scholars also argue that the agreement to keep the Eastern Aegean islands demilitarized was an essential precondition to the cession of these islands by the Ottoman Empire to Greece: the demilitarized status of these islands provided for in this [1914] decision was made a constituent of consent on the part of Turkey to the cession of territory; what was ceded is not territory but territory over which sovereign rights of Greece is restricted at the very moment it was established, in order to meet the security interests of Turkey.[58]

The issue of demilitarization is addressed once again in the 1947 Paris Treaty of Peace between the Allied Powers and Italy, in which the Dodecanese Islands are transferred from Italy to Greece. Article 14 said that these islands "shall be and shall remain demilitarized."[59] Greece has argued that Turkey has no standing

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[57] *See* Toluner, *Lemnos*, *supra* note 52. One scholar has said that because "the more pressing issue at Montreux was the passage of warships through the Straits, it looked as though the abolition of the demilitarisation clause of the Lausanne Convention were taken for granted." Masahiro Miyoshi, *The Aegean Sea and the Aegean Islands in Historical Perspective*, in *The Aegean Sea 2000* at 86, 87 (Bayram Ozturk ed. 2000). Professor Miyoshi thus concludes that "of all the Aegean islands, only the Dodecanese islands still remain demilitarised." *Id*. Henri Adam concludes, on the other hand, that the Montreux Convention allows for the remilitarization of Lemnos and Samothrace, but not the islands listed in Article 13 of the 1923 Lausanne Convention (Mytilene, Chios, Samos and Nikaria). Henri Adam, *Military Status of the Aegean Islands*, in *The Aegean Sea 2000* at 205, 206 (Bayram Ozturk ed. 2000)

[58] Toluner, *Reflections*, *supra* note 50, at 124. *See also* Gunduz, *supra* note 2, at 144 ("The demilitarsation which was the pre-condition of the transfer to Greece of the ownership of the islands is now seriously **de facto** changed or revised by Greece.")

[59] The 1947 Treaty, *supra* note 8, defines the key terms as follows:

For purposes of the present Treaty, the terms "demilitarization" and "demilitarized" shall be deemed to prohibit, in the territory and territorial waters concerned, all naval, military and military air installations, fortifications and their armaments; artificial military, naval and air obstacles; the basing or the permanent or temporary stationing of military, naval and military air units; military training in any form; and the production of war material. This does not prohibit internal security personnel restricted in number to meeting tasks of an internal character and equipped with weapons which can be carried and operated by one person, and the necessary military training of such personnel.

to seek to enforce this provision, because it was not a party to the 1947 Peace Treaty.[60]

During the 1960s, Greece began slowly to introduce military fortifications into Eastern Aegean islands. Military installations were introduced on Mytilene, Chios, Samos, and Ikaria, and a major air base was built on Lemnos. This Greek activity increased when Turkey sent troops to Cyprus in 1974. One Greek scholar reported in a 1997 publication that:

> The islands of Limnos, Lesvos, Chios, Samos, Kos and Rhodes have been in recent years fortified and some 30,000 troops are entrenched there. New airfields have been constructed in some Aegean islands (e.g. Syros, Karpathos) so that the Greek Air Force would not have to operate from remote bases on the mainland.[61]

Turkey insists that Greece's action is in violation of its treaty commitments, but Greece takes the position that the demilitarization requirements of the 1923 Lausanne Peace Treaty are now obsolete, because of Turkey's military actions.[62] Greece has thus "invoked a 'constant threat' by Turkey, implying an inherent right of self-defense according to Article 51 of the Charter of the United Nations."[63]

Breadth of the Territorial Sea

Since 1936,[64] Greece has claimed a six-nautical-mile territorial sea around its Aegean islands, but it has also insisted repeatedly that it is entitled to claim a 12-nautical-mile territorial sea under the 1982 Law of the Sea Convention.[65] Turkey

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[60] Andrew Wilson, *The Aegean Dispute* 16 (London, Institute for Strategic Studies, Adelphi Paper No. 155, 1979).

[61] George P. Politakis, *The Aegean Dispute in the 1990s: Naval Aspects of the New Law of the Sea Convention*, in *Greece and the Law of the Sea* 291, 307 (Theodore C. Kariotis ed. 1997)(similar to George P. Politakis, *The Aegean Agenda: Greek National Interests and the New Law of the Sea Convention*, 10 Int'l J. Marine & Coastal L. 497 (1995)).

[62] The Greeks apparently have intentionally repudiated the demilitarization provisions of the 1923 Lausanne Treaty. Prime-Minister Papandreau said on April 7, 1985: "Did we violate the Lausanne Treaty by militarizing the islands? Yes we did." Saltzman, *supra* note 13, at 181 n.54.

[63] *Id*. at 180; *see also* Athanassios G. Platias, *Greek Deterrence Strategy*, in *The Aegean After the Cold War* 61, 83 (Chircop, Gerolymatos and Iatrides eds.2000).

[64] Law No. 230 of Sept. 17, 1936, *Official Gazette (Greece)*, vol. A. No. 450/1936.

[65] *See* Ioannou, *supra* note 9, at 130 (explaining the Greek enactments and quoting from Article 2 of Greek Law 2321/1995, which ratified the Law of the Sea Convention and said that "Greece has the inalienable right, in application of Article

has responded that such an extension would be a *casus belli* because it would convert most of the Aegean into Greek territorial waters and restrict Turkish navigational freedoms and rights of overflight.[66]

The unique geography and history in the Aegean make this question a complex one.[67] If Greece doubled its claimed territorial sea from six- to12 nautical miles, it would increase the percentage of Aegean waters under Greece's sovereign control from about 35% to about 64%.[68] Turkey would have sovereignty over only 8.3% of the Aegean waters, and the percentage that would be "high seas" would be reduced from about 56% to about 26%.[69] Article 3 of the 1982 Law of the Sea Convention says that all states have the "right" to establish a territorial sea "up to a limit not exceeding 12 nautical miles" from their coasts.[70] Turkey has not signed or ratified the Convention, however, and has done everything it possibly can do to establish itself as a "persistent objector," resisting the establishment of this norm.[71]

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3 of the Convention which is being ratified, to extend at any time the breadth of its territorial sea up to a distance of 12 nautical miles.").

[66] *See, e.g.*, Gunduz, *supra* note 2, at 150; Ioannou, supra note 9, at 118.

[67] Some of the material that follows in this section is adapted from Jon M. Van Dyke, The Aegean Sea Dispute: Options and Avenues, 20 Marine Policy 397, 401-02 (1996).

[68] Politakis, supra note 61, at 294; Ioannou, supra note 9, at 132. Some articles give different figures, depending, perhaps, on how the Aegean is defined. See, e.g., Theodore C. Kariotis, The Case for a Greek Exclusive Economic Zone, Marine Policy 3, 5 (Jan. 1990)(stating that Greece currently exercises sovereignty over 43.5% of the Aegean, Turkey has 7.5%, and 49% is high seas).

[69] Faraj Abdullah Ahnish, The International Law of Maritime Boundaries and the Practice of States in the Mediterranean Sea 268 (1993).

[70] United Nations Convention on the Law of the Sea, art. 3, Dec. 10, 1982, UN Doc. 62/122, reprinted in 21 I.L.M. 1265 (1982).

[71] See Toluner, Reflections, supra note 50, at 127-31. The "persistent objector" position is somewhat controversial, because customary law can emerge despite disagreement about or rejection of a norm by a few countries. See, e.g., Jordan J. Paust, Joan M. Fitzpatrick, and Jon M. Van Dyke, International Law and Litigation in the U.S. 93, 96-97 (2000). Whether a persistent objector can opt out of a norm appears to depend on the nature and importance of the norm – i.e., does it require a global approach or are regional or unique perspectives appropriate – and whether the objector has a particular stake in the norm and the clout to prevent it from emerging as an obligatory global norm. Because of the geographical diversity of the world's oceans and coastlines, and the need to recognize and accommodate unique geographical situations, the breadth of the territorial sea is an appropriate example of a norm that can be successfully objected to by a persistent objector.

It can thus claim that a "regional state practice" in the Aegean limits all territorial sea claims to six nautical miles.[72]

Turkey can point to Articles 122 and 123 of the Law of the Sea Convention which--although written in vague and general language--recognize that "semi-enclosed seas," such as the Aegean, require special management measures and require states bordering on such seas to cooperate in coordinating their policies. Turkey can also cite to Article 300 of the Convention, which says that states must exercise their rights under the Convention "in a manner which would not constitute an abuse of right." Greek action to establish a 12-nautical-mile territorial sea, especially around its islands in the Eastern Aegean, would appear to be such an abuse because the expanded territorial sea would fill most of the Aegean and would completely fill it in the southern sector.[73]

Such a move would, in Turkey's view, "upset the equilibrium which was established between the two States by the Lausanne Treaty," which, "according to Turkey, recognizes economic, commercial, navigational, and security rights of both Greece and Turkey in the Aegean."[74] Such a step would deny Turkey the right to exercise high seas freedoms in the Aegean that it has "enjoyed uninterruptedly...for hundreds of years."[75] These freedoms include "freedoms of overflight, navigation, fishing, cable and pipeline laying, scientific research, survey activities, etc.,"[76] but include, in particular, Turkey's unimpeded ability to moved its ships and planes between the Turkish Straits and the Mediterranean. The threats to Turkey's navigational freedoms exist because only the right of innocent passage exists through territorial seas, innocent passage can be suspended in times of war or emergency, and innocent passage does not permit submerged passage by submarines or overflight by planes, even in peacetime.[77] Turkey may, thus, be able to argue that the waters in the Aegean beyond Greece's six-mile territorial seas are "historic waters" governed by a condominium regime of sharing between Greece and Turkey, similar to the waters of the Gulf of Fonseca (and the EEZ corridor extending from the Gulf to the high seas), which are shared between El Salvador, Honduras, and

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[72] Greece first claimed a six-nautical-mile territorial sea in 1936. The United Kingdom objected, but Turkey did not. Greece and Turkey were on friendly terms at that time, and were being threatened by Italy, and some ideas were being exchanged regarding the formation of a confederation. When Turkey extended its Aegean territorial sea to six nautical miles in 1964, Greece objected, arguing that this extension interfered with Greek fishing practices. Statement of Ambassador Namik Yolga, at the Aegean Issues Conference, Istanbul, Jan. 20, 1995.

[73] In the Norwegian Fisheries Case (U.K. v. Nor.), 1951 I.C.J. 116, the Court stated that the establishment of baselines was not something that a nation could do unilaterally, without consideration of its effect on other nations.

[74] Ahnish, supra note 69, at 268.

[75] Gunduz, supra note 2, at 145.

[76] Id.

[77] Law of the Sea Convention, supra note 70, arts. 17-19.

Nicaragua,[78] and also similar in some respects to the waters in Palk Bay, which are historic waters shared between India and Sri Lanka.

Examples can be found where states have agreed to establish territorial seas around islands of less than 12 nautical miles, when they are in cramped locations or are on the "wrong" side of the median line. Hiran W. Jayewardene, in his 1990 book,[79] cites the cases of the Venezuelan island of Isla Patos (between Venezuela and Trinidad & Tobago),[80] the Abu Dhabi island of Dayyinah (between Abu Dhabi and Qatar),[81] and the Australian islands in the Torres Strait (between Australia and Papua New Guinea),[82] all of which have been given only three nautical miles of territorial sea. Ambassador Jayewardene cites these cases to support the view that "[s]imilar solutions may be considered with regard to" the Greek islands that are adjacent to Turkey's coast.[83] Another intriguing example is found in the 1984 agreement between Argentina and Chile, where these two countries limited their territorial sea claim *in relation to each other* to three nautical miles, but claimed 12-nautical-mile territorial seas with regard to all other countries.[84]

Also of some possible significance is the fact that Greece--in its continental shelf delimitation agreement with Italy[85]--accepted that in the north its island of Fanos would receive only a three-quarter effect and that in the south the Greek islands of Strophades would receive a semi-effect.[86]

Turkey's position is strongest with regard to the islands in the eastern Aegean, particularly those near its coast. Some of the islands in the western Aegean are very close to Greece's continental coast, and thus are practically part of the Greek mainland.[87] But those on the eastern half do not have the same geographical links

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[78] Gulf of Fonseca case, supra note 17.

[79] Hiran W. Jayewardene, The Regime of Islands in International Law (1990).

[80] Id. at 425

[81] Id. at 437.

[82] Id. at 441, 455, and 485.

[83] Id. at 484; see also id. at 485. At another part of the book, Ambassador Jayewardene states that "State practice and equity" would indicate that an equidistance line should not be drawn between the Greek islands and Turkey's coast and that some "compromise" should be reached to enable both countries to have some maritime space. Id. at 446-47.

[84] Treaty of Peace and Friendship Between Argentina and Chile, Nov. 29, 1984, reprinted in Jonathan Charney and Lewis Alexander, International Maritime Boundaries 719 (1994); see also Papal Proposal in the Beagle Channel Dispute Proposal of the Mediator (Dec. 12, 1980), art. 9, 24 I.L.M. 1, 13 (1985).

[85] Agreement between Greece and Italy on the Continental Shelf, May 24, 1977, U.S. Dept. of State Limits in the Sea No. 96 (1982).

[86] See G. Francalanci and Tullio Scovazzi, Lines in the Sea 222 (1994).

[87] Turkey's declaration of and acceptance of 12-nautical-mile territorial seas in the Black Sea and the Mediterranean indicate that Turkey accepts this limit as valid in appropriate (and reciprocal) circumstances. But by focusing on the eastern Aegean,

with the Greek mainland and present security and navigational threats to Turkey. One possible compromise might be to accept a 12-nautical-mile territorial sea from Greece's coasts, but not from its islands.[88] Another might be to permit at least some of Greece's islands in the Western Aegean to generate 12-nautical-mile zones, while continuing to insist that the eastern Greek islands limit their territorial seas to six nautical miles.

Air Defense Zones Around the Greek Islands

Beginning in 1931 (five years before it expanded its territorial sea from three to six nautical miles), Greece claimed a ten-nautical-mile air defense zone around each of its islands.[89] This claim has significant impacts on the ability of Turkish planes to fly over the Aegean. The United Kingdom protested this claim in 1940, and, beginning in 1974, Turkey has challenged this zone repeatedly. Turkey argues that it was not aware of Greece's ten-nautical-mile claim until June 2, 1974, when the International Civil Aviation Organization (at Greece's request) formally announced the claim, and Turkey vigorously denies that it has acquiesced to the Greek claim. Since then, "almost on a daily basis, Turkey has sent its military airplanes to penetrate Greek airspace between six and ten miles,"[90] and "US aircraft in NATO exercises over the Aegean have also regularly contested the outer four miles of the Greek airspace."[91] Turkey argues the close proximity of the two states makes it difficult to justify drawing a strict boundary in such a tight amount of airspace.

Some commentators have observed that no other country in the world has a different territorial water boundary from its airspace, and that this situation creates the anomaly that a helicopter lifting off from a Turkish ship on the high seas, seven nautical miles from a Greek island, would be entering into claimed Greek airspace as it rises into the air.[92] Greek scholars argue that since Greece would be entitled to

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where Turkey's navigational and security interests are most directly impacted, Turkey can make a strong case that Greece should be limited to a six-nautical-mile territorial sea in this area.

[88] *See, e.g.,* Theodoropoulos, *supra* note 1, at 331: "Greece might then be willing to exercise its right to a 12-mile territorial sea only along its continental coast, leaving the territorial sea round the islands in its present status and rearranging the width of its air-space accordingly."

[89] *See* Ioannou, *supra* note 9, at 129 (explaining the sequence of Greek laws and presidential decrees that claimed airspace extending to ten nautical miles around Greek land territory and a territorial sea of six nautical miles).

[90] *Id.* at 133.

[91] Politakis, *supra* note 61, at 298.

[92] Paolo Bargiacchi, *Freedom of Overflight in the High Seas*, in *The Aegean Sea 2000* at 214, 219 n. 92 (Bayram Ozturk, ed. 2000); even a Greek scholar has characterized the situation as "unorthodox and unprecedented," "arbitrary," and "manifestly controversial and unreasonable." Politakis, *supra* note 61, at 298.

claim a territorial sea of 12 nautical miles (under Article 3 of the Law of the Sea Convention), its claim of a ten-nautical-mile air defense zone must also be permissible under international law.

Flight Information Region

A somewhat related problem exists because, in 1952, the International Civil Aviation Organization (ICAO) assigned to Greece air traffic control responsibility for the Aegean Flight Information Region (FIR). Turkey voiced no objection at the time, but in August 1974, after the Cyprus intervention, Turkey issued a notice requiring all aircraft approaching Turkish airspace to report their position and provide a flight plan once they reached the Aegean median line. Greece protested, and tension was high until 1980, when both countries withdrew their declarations that the Aegean was a "dangerous region," although Turkey reserved the right to revise the FIR boundaries. An FIR cannot confirm or deny international boundaries, but this issue nonetheless remains a festering problem between the two neighbors.

Formally, the ICAO has jurisdiction only over civilian (nonmilitary) aircraft,[93] but military and governmental planes are expected "to operate with due regard for the safety of civil aviation,"[94] and thus to cooperate with the ICAO system. The Law of the Sea Convention also instructs governmental and military planes exercising their right of transit passage over straits to "observe the Rules of the Air established by the International Civil Aviation Organization as they apply to civil aircraft."[95] This arrangement presents an awkward situation for the Turkish military, because safety considerations encourage them to cooperate with the Greek authorities operating the FIR in the Aegean, even though their country's political position opposes any recognition of Greek authority over this region.

Delimitation of the Continental Shelf

The delimitation of the continental shelf boundary in the Aegean offers a challenge that many authors have written about. The close proximity of the eastern Greek islands to Turkey's coastline presents a geographical configuration unlike any other in the world.

The Greek island of Samos comes to about one nautical mile from the Turkish coast, and Kos and some others are almost as close. Because a number of the Greek islands hug the Turkish coast, the boundary delimitation involves both delimitation of the territorial sea, which, if the Law of the Sea Convention reflects customary international law in this matter, would be governed by Article 15 of the Law of the

[93] Article 3(a) of the Convention on International Civil Aviation (Chicago Convention), Dec. 7, 1944, says that the Convention applies only to civil aircraft.
[94] Article 3(d) of the Chicago Convention.
[95] Law of the Sea Convention, *supra* note 70, art 39(3).

Sea Convention, as well as delimitation of the continental shelf, which in the Convention is governed by Article 83.

In the recent decision of the International Court of Justice in the *Qatar-Bahrain Maritime Delimitation and Territorial Questions*,[96] the Court relied upon the principles of the Law of the Sea Convention, even though Qatar had only signed but had not ratified it, because the parties agreed that most of the provisions of the Convention relevant to their dispute reflected customary international law.[97] In particular, the Court noted that Article 15 of the 1982 Convention was virtually identical to Article 12(1) of the 1958 Convention on the Territorial Sea and the Contiguous Zone and was to be regarded as having a customary character.[98]

Another important issue addressed squarely in the *Qatar-Bahrain* case was the question of drawing baselines. Some Greek authors have argued that Greece should be allowed to draw baselines connecting their islands,[99] similar to those that can be drawn around archipelagic states,[100] thus strengthening its claim to maritime space in the Aegean. The International Court of Justice rejected Bahrain's argument that it should be able to draw baselines connecting its islands, as a *de facto* archipelagic state, and ruled instead that it was improper to draw baselines around islands that are part of an overall geographical configuration, unless they were a fringe of islands along a coastline.[101] The waters between Bahrain's islands are thus territorial waters, rather than internal waters, and the right of innocent passage exists in these waters.[102]

Turkey has argued that the continental land masses should be given primary emphasis in drawing continental shelf boundaries, because the continental shelf is the natural prolongation of such continental land masses, and that the Greek islands do not possess continental shelves of their own.[103] Turkey has also stressed its long

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[96] *Qatar-Bahrain* case, *supra* note 17, Decision of March 16, 2001.
[97] *Id*. para. 167.
[98] *Id*., paras. 175-76.
[99] *See, e.g.*, Politakis, *supra* note 61, at 300 (arguing that "a reasonable claim" could be made to draw straight baselines around the northern Sporades and Cyclades islands in the Aegean, which, "under the current 6-mile [territorial sea] limit...would eliminate several pockets of high seas existing today in between the islands").
[100] Law of the Sea Convention, *supra* note 70, art. 47.
[101] *Qatar-Bahrain* decision of March 16, 2001, *supra* note 17, paras. 210-16; in paragraph 212, the Court said that straight baselines can be drawn only if certain conditions are met, and that "[s]uch conditions are primarily that either the coastline is deeply indented and cut into, or that there is a fringe of islands along the coast in its immediate vicinity."
[102] *Id*., para. 223.
[103] *Note verbale* from Turkey to Greece, Feb. 27, 1974, quoted by Clive R. Symmons, *The Maritime Zones of Islands in International Law* 137 (1979). In 1976, Turkish President Fahri Koruturk said that the Aegean is "an extension of Asia Minor, and we will never allow it to be turned into an internal sea of another

coastline,[104] its large coastal population,[105] its long maritime tradition, and its historical usage of the Aegean for navigation[106] and resource exploitation for many centuries.[107] In fact, islands have been given reduced power to generate extended maritime zones in every major judicial or arbitral decision delimiting maritime boundaries,[108] and this same approach would appear to be appropriate in the Aegean, to achieve the "equitable result" required by Articles 74 and 83 of the 1982 Law of the Sea Convention and by customary international law. Turkey also points out that it has neither signed nor ratified the 1982 United Nations Law of the Sea Convention, and has persistently rejected any argument that would allow Greece to extend its territorial seas in the Aegean or limit Turkish access to maritime areas it

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country." Time, Aug. 23, 1976, at 33. Some authors contend that the natural prolongation theory cannot help either claimant, as a matter of geography, because the Aegean seabed consists of a "continuous island shelf slope" with two troughs that constitute "incidental break[s]" in the continuous shelf, and therefore that "neither the geomorphology nor the geology of the Aegean could provide a proper criterion for delimitation." Ahnish, *supra* note 69, at 357 n.2; quoted in Christos L. Rozakis, *The Greek Continental Shelf*, in *Greece and the Law of the Sea* 67, 99 (Theodore C. Kariotis ed. 1977).

[104] Turkey's coastline stretches 2,820 km along the Aegean Sea. Augusto Sinagra, *The Problem of Delimiting the Territorial Waters Betweeen Greece and Turkey in the Aegean Sea*, in *The Aegean Sea 2000* at 170, 172 (Bayram Ozturk ed. 2000).

[105] Turkey's overall current population is about 67 million, compared to Greece's of about 11 or 12 million**.** Using figures that are now somewhat dated, Ahnish said in his 1993 publication that about 10 million Turks (22% of the country's population) lived along its Aegean coast, while only 145,071 Greeks lived on the Aegean islands. Ahnish, *supra* note 69, at 363. Using data from the *Statistical Yearbook of Greece* (1986), Ahnish reports, *id*. at 366, that 2,871 lived on Samothrace, 15,721 persons lived on Limnos, 88, 601 lived on Lesvos, 48,700 lived on Chios, 31,629 lived on Samos, 7,559 lived on Ikaria, 14,295 lived on Kalimnos, 20,350 lived on Kos, 4,645 lived on Karpathos, 87,831 lived on Rhodes, and 222 lived on Castellorizo.

[106] "[T]he Turkish navy enjoys today a considerable freedom of deployment upon large areas of high seas (56% of total area) in the northern, central and southern Aegean where it operates regularly (the Greek and the Turkish navy hold every year over a dozen air-naval exercises each)." Politakis, *supra* note 61, at 295.

[107] *See* Republic of Turkey Ministry of Foreign Affairs, *Turkish-Greek Relations Aegean Problems*, http://www.mfa.gov.tr/grupa/ade/adea/default.htm (visited April 9, 2000).

[108] See text and notes infra at notes 123-29, and see Van Dyke, Options and Avenues, supra note 67, at 400; Valencia, Van Dyke, and Ludwig, supra note 16, at 1; Jon M. Van Dyke, The Role of Islands in Delimiting Maritime Zones – The Boundary Between Turkey and Greece, in The Aegean Issues: Problems and Prospects 263 (Foreign Policy Institute, Ankara, 1989).

has traditionally utilized for resources and navigation.[109] Those authors who have found the Turkish legal arguments to be sound have concluded that Turkey should be entitled to about one-third of the continental shelves and exclusive economic zones in the Aegean.[110] Authors supporting the Greek position cite Article 121 of the 1982 United Nations Law of the Sea Convention for the proposition that islands are entitled to generate continental shelves and exclusive economic zones in the same manner as continental land masses, and hence that the continental shelf boundary should be the median or equidistance line between the eastern Greek islands and the Turkish coastline.[111] Greek authors also emphasize their security concerns and argue that if the continental shelf boundary were a median line in the middle of the Aegean between the continental land masses of the two countries (ignoring the islands) such a line would threaten the physical contiguity and military security of the Greek nation. One Greek scholar who has written several articles on this topic summarizes his position as follows:

> First, equidistance is the main factor and coastlengths come in only where the disproportion of the proposed shares to lengths is gross and only for a moderate correction. Second, all maritime fronts which face the delimitation area in all directions are treated equally and irrespective of whether they belong to mainlands or islands. Third, a minimum shelf and exclusive zone of 12 miles is recognized under all circumstances, subject, of course to the median line limitation. Fourth, whether the area is a 'semi-enclosed sea' is irrelevant in determining the maritime zones, although, of course, the availability of space affects all sorts of calculations relating especially to the proportionality adjustments and the tangential factors. It is a major error, therefore, to calculate the shares in the Aegean as if proportionality were the only factor or on the assumption, detached from

[109] One Greek author has characterized Turkey's efforts to protest the provisions that were eventually included in the 1982 Law of the Sea Convention as a "near obsession with the notions of equity and of special circumstances in all their various forms." Ioannou, supra note 9, at 127.

[110] See, e.g., Donald E. Karl, Islands and the Delimitation of the Continental Shelf: A Framework for Analysis, 71 Am. J. Int'l L. 642, 671-72 (1977); Jon M. Van Dyke, The Role of Islands in Delimiting Maritime Zones: The Case of the Aegean Sea, 8 Ocean Yearbook 44, 67 (1989).

[111] See, e.g., Rozakis, supra note 103, at 100-01; Phaedon John Kozyris, Equity, Equidistance, Proportionality at Sea: The Status of Island Coastal Fronts and a Coda for the Aegean, in Greece and the Law of the Sea 21, 29 (Theodore C. Kariotis ed. 1997)(arguing that the decisions in the St. Pierre & Miquelon and Jan Mayen "suggest[] that Article 121.2 of the UN LOS Convention codifies customary international law"). See also Hellenic Ministry of Foreign Affairs, Unilateral Turkish Claims in the Aegean, http://www.mfa.gr/foreign/bilateral/aegean.htm (visited April 9, 2000); Greek Ministry of Press and Mass Media – Secretariat General of Information, The International Legal Status of the Aegean.

> the proportionality process, that the territorial sea of some islands is not only their minimum but also their maximum entitlement.[112]. Utilizing these principles, Professor Kozyris concludes that Turkey is entitled, at most, to "between 11-12%" of the Aegean's waters and continental shelf.[113] Greek authors have characterized the idea that territorial-sea enclaves be drawn around the eastern Greek islands as "unthinkable."[114] Some have acknowledged that some degree of "proportionality" would be considered by an international tribunal, although they are reluctant to grant Turkey much of a share under this principle.[115] Another Greek scholar agreed with Professor Kozyris's estimate and argued that the most Turkey could expect under "equity principle" would be "10-15% of the total continental shelf area of the Aegean."[116]

In my earlier writings,[117] I have suggested that the most equitable solution to this dispute would involve dividing the Aegean into three sectors because of the different geography as one goes from north to south.[118] In the northern Aegean, which has

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[112] Kozyris, supra note 111, at 47-48 (citations eliminated); see also Phaedon John Kozyris, Lifting the Veils of Equity in Maritime Entitlements: Equidistance with Proportionality Around the Islands, 26 Denver J. Int'l L. & Pol'y 319 (1998).

[113] Id. at 50. At another point, id. at 65 n.171, Kozyris cites Andrew Wilson, supra note 60, at 14, for the proposition that "[t]he total Turkish share may range between 8-13% [of the Aegean] depending on how generous one wants to be." If the median line were drawn between Greece's eastern islands and Turkey's coast, Turkey would have 8.75% of the waters and continental shelf of the Aegean.

[114] Id. Professor Kozyris (id. at 64 n.168) cites Derek W. Bowett, The Legal Regime of Islands in International Law 273 (1979), for the proposition that "The idea of a mid-sea median line which would enclave those Greek islands on the Turkish side of such a line is completely rejected [in state practice]." See also Rozakis, supra note 103, at 101 (contending that because of Greece's security needs, no international judge would "apply a line which would...cut off Greek insular territories from the mainland territories").

[115] Rozakis, *supra* note 103, at 101: "It may also be assumed that because of the difficulties in tracing the median line in some areas (mainly in the central-eastern Aegean), an application of mathematical calculations in attributing the continental shelf, like those applied in the *Libya-Malta* case, might prove unavoidable."

[116] Theodore C. Kariotis, *Greek Fisheries and the Role of the Exclusive Economic Zone*, in *Greece and the Law of the Sea* 210 (Theodore C. Kariotis ed. 1997).

[117] *See, e.g.*, Van Dyke, *Options and Avenues, supra* note 67, at 402-03; Jon M. Van Dyke, *Maritime Delimitation in the Aegean Sea*, in *The Aegean Sea 2000* at 165, 166 (Bayram Ozturk ed. 2000).

[118] Although most of the delimitation discussion has focused on the continental shelf, the day may come when Greece and Turkey also want to claim and delimit exclusive economic zones in the Aegean. Almost all the recent delimitations have drawn a single maritime line for the continental shelf and the exclusive economic

relatively few islands, a median line could be drawn between the continental land masses of the two countries, which would be adjusted somewhat toward Turkey because of the location of the islands and the proportionality of the coasts. Six-nautical-mile territorial-sea enclaves could be drawn around the Greek islands on the Turkish side of this line.

In the central sector, the number of Greek islands increases, so the maritime boundary would move eastward toward Turkey's coast. But Turkey should be allocated enough maritime area to give it a corridor from Istanbul to the Mediterranean and thus to protect its security needs. In the southern sector, the number of Greek islands increases once again, and thus the maritime boundary line would move further east, but a Turkish corridor must still be provided to ensure unimpeded access. In drawing the precise lines, attention must be given to the comparative length of the coastlines of the two countries.[119]

If all islands are ignored, this ratio favors Greece by 59 to 41, and if the islands are included, the ratio is in favor of Greece by a 4 to 1 margin. Decisions of the International Court of Justice have not used such figures with precision, but nonetheless have examined them to determine if a solution comports with a sense of rough justice or relative fairness. If its earlier decisions are followed, the ICJ would probably adopt a solution that allocated to Turkey somewhere between 20 and 41% of the Aegean's EEZ and continental shelf, while also protecting its security and navigational interests by ensuring that it has a corridor connecting the Turkish Black Sea Straits to the Mediterranean.[120]

Another solution that has appealed to authors seeking an equitable result in this complex geographical context is the "fingers" approach.[121] Under this solution, Turkish sovereignty would be recognized over the continental shelf that extends from Turkey's Aegean coast through the three or four gaps in the eastern Greek islands that hug Turkey's coast. One Greek writer has acknowledged that this

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zone, and such an approach may someday be logical for the Aegean as well. *See, e.g.*, Kariotis, *supra* note 116, at 211 (summarizing recent cases and saying that a "single maritime boundary is a very reasonable solution for most states").

[119] Van Dyke, *Options and Avenues*, *supra* note 67, at 398, 403. *See also* the *Eritrea-Yemen* Arbitration, *supra* note 17, where the Tribunal relied upon the test of "a reasonable degree of proportionality" to determine the equitableness the boundary line; the tribunal was satisfied that this test was met, in light of the Eritrea-Yemen coastal length ratio (measured in terms of their general direction) of 1:1.31 and the ratio of their water areas of 1:1.09. 1999 Award, paras. 20, 39-43, 117, and 165-68.

[120] One oft-cited U.S. scholar suggested that Greece should receive 66-70% of the Aegean continental shelf. Donald E. Karl, *Islands and the Delimitation of the Continental Shelf*: *A Framework for Analysis*, 71 Am. J. Int'l L. 641 (1977). Compare this view to that of Professor Kozyris, *supra* note 111, at 50, who argues that Turkey should receive only 11-12% of the maritime space of the Aegean.

[121] *See, e.g.*, Wilson, *supra* note 60; Miyoshi, *supra* note 57, at 92.

approach might be appropriate to give Turkey a continental shelf "in the wide openings of the sea between the islands."[122]

If the Aegean boundary delimitation were submitted to an international tribunal for adjudication, the tribunal would have to determine what adjustments should be made from the standard "median-line/equidistance" approach in the name of "equity" in light of the "special circumstances" created by the geography of the Aegean, the unique security interests of Turkey, and the disproportionate nature of the outcome if the median line from Greece's eastern islands were to be used. The disproportionate outcome is linked to access to resources, as well as the security claim.

With regard to small islands, tribunals have not given islands full power to generate maritime zones if the outcome of such generation would be to limit the zones created by adjacent or opposite continental land masses. Tiny islets are frequently ignored altogether,[123] but even some substantial islands are given less power to generate zones that their location would warrant.[124] This approach was

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[122] Rozakis, *supra* note 103, at 101; *see also* Kariotis, *supra* note 116, at 210, and Kariotis, *Exclusive Economic Zone, supra* note 68, at 13 (recognizing the possibility that the "fingers" approach might be the appropriate solution, but arguing that it Turkey should receive less maritime space than that shown in Wilson's map (reprinted *id*. at 214 and in Marine Policy at 14) because the Greek islands are entitled to territorial seas of 12 nautical miles around their shores).

[123] This approach was first utilized in the *North Sea Continental Shelf Case (Germany v. Denmark; Germany v. Netherlands)*, 1969 I.C.J. 3, para. 101(d), where the Court said that "the presence of islets, rocks and minor coastal projections, the disproportionality distorting effects of which can be eliminated by other means," should be ignored in continental shelf delimitation. In the *Case Concerning the Delimitation of the Continental Shelf Between the United Kingdomof Great Britain and Northern Ireland and the French Republic*, 18 U.N.R.I.A.A. 74 (1977), *reprinted in* 18 I.L.M. 397 (1979), the tribunal did not allow the Channel Islands, which were on the "wrong side" of the median line drawn between the French mainland and England, to affect the delimitation at all (giving them 12-nautical-mile territorial sea enclaves), and gave only "half effect" to Britain's Scilly Isles, located off the British Coast near Land's End. Half effect was also given to Seal and Mud Islands in the *Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada v. U.S.A.)*, 1984 I.C.J. 336, para. 222. (Seal Island is 2 ½ miles long and is inhabited year round.) And in *Continental Shelf (Libya v. Malta),* 1985 I.C.J. 13, 48 para. 64, the Court ruled that equitable principles required that the uninhabited tiny island of Filfla (belonging to Malta, 5 km south of the main island) should not be considered at all in delimiting the boundary between the two countries.

[124] In *Continental Shelf (Tunisia/Libya),* 1982 I.C.J. 89 para. 129, the Court gave only half-effect to Tunisia's Kerkennah Islands, even though the main island is 180 square kilometers and then had a population of 15,000. Even more significantly, in *Continental Shelf (Libya v. Malta),* 1985 I.C.J. 13, the Court refused to give full

also followed in the recent *Eritrea-Yemen* arbitration, where the tribunal gave no effect whatsoever to the Yemenese island of Jabal al-Tayr and to those in the al-Zubayr group, because their "barren and inhospitable nature and their position well out to sea...mean that they should not be taken into consideration in computing the boundary line."[125]

Similarly, in the recent *Qatar-Bahrain* case, the International Court of Justice ignored completely the presence of the small, uninhabited, and barren Bahraini islet of Qit'at Jaradah, situated about midway between the main island of Bahrain and the Qatar peninsula, because it would be inappropriate to allow such an insignificant maritime feature to have such a disproportionate effect on a maritime delimitation line.[126] The Court also decided to ignore completely the "sizeable maritime feature" of Fasht al Jarim located well out to sea in Bahrain's territorial waters, which Qatar characterized as a low-tide elevation and Bahrain called an island, and about which the tribunal said "at most a minute part is above water at high tide."[127] Even if it cannot be classified as an "island," the Court noted, as a low-tide elevation it could serve as a baseline from which the territorial sea, exclusive economic zone, and continental shelf could be measured.[128] But using the feature as such a baseline would "distort the boundary and have disproportionate

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effect to Malta's main island, which is the size of Washington, D.C., and contains hundreds of thousands of individuals, and adjusted the median line northward because of the greater power of the Libyan coast to generate a maritime zone.

[125] *Eritrea-Yemen* arbitration, *supra* note 17, 1999 Award, paras.147-48.

The tribunal also gave the Yemenese islands in the Zuqar-Hanish group less power to affect the placement of the delimitation line than they would have had if they had been continental landmasses. These islets, located near the middle of the Bab el Mandeb Strait at the entrance to the Red Sea, are given territorial seas, but the median line that would otherwise be drawn between the continental territory of the two countries is adjusted only slightly to give Yemen the full territorial sea around these islets. The tribunal did not, therefore, view these islets as constituting a separate and distinct area of land from which a median or equidistant line should be measured, illustrating once again that small islands do not have the same power to generate maritime zones as do continental land masses. *Id*. paras. 160-61.

[126] *Qatar-Bahrain* Decision of March 13, 2001, *supra* note 17, paras. 219 (citing *North Sea Continental Shelf*, 1969 I.C.J. 36, para. 57, and *Libya-Malta Continental Shelf*, 1985 I.C.J. 48, para. 64, for the proposition that "the Court has sometimes been led to eliminate the disproportionate effect of small islands"). The Court reached this conclusion even though it asserted, in paragraph 185, that Article 121(2) of the Law of the Sea Convention "reflects customary international law" and that "islands, regardless of their size, in this respect enjoy the same status, and therefore generate the same maritime rights, as other land territory."

[127] *Id.* at paras. 245-48.

[128] *Id.* at para. 245.

effects,"[129] and, in order to avoid that undesirable result, the Court decided to ignore the feature altogether.

Greek writers try to ignore or explain away these precedents by saying that they are based on "proportionality,"[130] or because the islands were totally embraced by the opposite land mass,[131] or because of some other equitable consideration.[132] The concept of "special circumstances" or "relevant circumstances" has been utilized by tribunals to make adjustments that seem appropriate in light of relationships – geographical and otherwise – between the opposite or adjacent states. As explained elsewhere,[133] these circumstances include security needs as well as geographical anomalies. The attention tribunals give to security interests was restated recently in the *Eritrea-Yemen* abitration, where the tribunal quoted from Judge Manfred Lachs's opinion in the *Guinea/Guinea-Bissau* arbitration, saying that "our principal concern has been to avoid, by one means or another, one of the Parties finding itself faced with the exercise of rights, opposite to and in the

[129] *Id*. at para. 247 (quoting from *Anglo-French Continental Shelf Arbitration*, 18 R.I.A.A. 114, para. 244).

[130] Kozyris, *supra* note 111, at 30.

[131] As in the case of the Channel Islands in the *Anglo-French Arbitration*. Kozyris, *supra* note 111, at 64 n.168, cites Barbara Kwiatkowska, *Maritime Boundary Delimitation Between Opposite and Adjacent States in the New Law of the Sea – Some Implications for the Aegean*, in *The Aegean Issues: Problems and Prospects* 202-03 (Foreign Policy Institute, Ankara, 1989), for the proposition that "the *Anglo-French Arbitration* analogy does not apply because the Turkish coast does not embrace the Greek islands, the coasts are not in broad geographical equality and the islands are not detached from their mainland and they dominate the area."

[132] Greek scholars occasionally mischaracterize judicial decisions, as, for instance, when Professor Kozyris argues that the result in the *St. Pierre and Miquelon* case "laid to rest" "any doubts about the equal treatment of islands." Kozyris, *supra* note 111, at 32. In fact, the arbitral tribunal gave the small, but permanently populated French islands of St. Pierre and Miquelon considerably less power to generate zones than the larger Canadian landmasses they are near.

But even the Greek writers have acknowledged that islands are entitled to less attention than land masses in drawing maritime boundaries. *See, e.g.*, Kozyris, *supra* note 111, at 31, where he explains the treatment of Seal Island in the *Gulf of Maine* case by saying: "The solution, quite generous to the island in result, was to give the island half-effect for a transverse displacement of the median line." Professor Kozyris does not explain why this result is "quite generous to the island in result." Seal Island has a permanent year-round population, and thus would appear to have the same status as any other island, including the Greek islands.

[133] *See* Van Dyke, *Options and Avenues*, *supra* note 67, at 400-01.

immediate vicinity of its coast, which might interfere with its right to development *or put its security at risk."*[134]

In the Aegean, Turkey's security needs are significant, and it is highly likely that any tribunal would recognize and try to accommodate them. The Greek islands trap the Turkish coastline,[135] and the maritime zones claimed by some Greek authors would significantly impair Turkish navigational freedoms. One aspect of the customary-international-law "principle of nonencroachment" is codified in Article 7(6) of the Law of the Sea Convention[136] and this principle seems generally to stand for the proposition that the maritime zones of one state should not be permitted to cut off the extension of another state's entry into the high seas.[137] The principle of nonencroachment has been recognized by the International Court of Justice in several cases, including the *North Sea Continental Shelf* case, the *Jan Mayen* case, and the *Gulf of Fonseca* case.[138] In *Gulf of Fonseca*, the Court recognized a shared or "condominium" control over the resources of the Gulf and extended that condominium regime into an EEZ corridor projecting to the high seas.[139] And in the *St. Pierre and Miquelon* Arbitration between France and Canada, the tribunal gave the French islands a narrow 200 nautical-mile long EEZ corridor across the Grand Banks to the high seas.[140]

With regard to resources, tribunals have tended to ignore them, with the notable exception of the *Jan Mayen* case, where the ICJ adjusted its outcome to ensure equitable access by both parties to the important capelin fishery. This decision has been (unenthusiastically) summarized by the Greek author Phaedon John Kozyris as follows:

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[134] *Eritrea-Yemen* arbitration, *supra* note 17, 1999 Award, para. 157 (quoting from 25 I.L.M. 251)(emphasis added).

[135] *See* Toluner, *Reflections*, *supra* note 50, at 133. Kozyris, *supra* note 111, at 65 n.168, responds to the argument that the principle of nonencroachment should give Turkey some access to the open ocean by asserting that "the Turkish coast is...also encroaching on the Greek islands." Similarly, Rozakis, *supra* note 103, at 101, asserts that Greek security would be compromised if Greek insular territories were cut off rom its mainland territories.

[136] Article 7(6) of the Law of the Sea Convention, *supra* note 70, says that no state can use straight baselines " in such a manner as to cut off the territorial sea of another State from the high seas or an exclusive economic zone."

[137] *See also Case Concerning Maritime Delimitation in the Area Between Greenland and Jan Mayen (Denmark v. Norway)*, 1993 I.C.J. 38, 69 para. 70, and 79-81 para. 92 (delimiting the EEZ in a manner that protected Norway's access to the capelin fishery).

[138] *See*, *e.g.*, 1993 I.C.J. para. 59 and 1992 I.C.J. para. 351.

[139] *Land, Island and Maritime Frontier Dispute (El Salvador v. Honduras; Nicaragua intervening)*, 1992 I.C.J. at 606-09 paras. 415-20.

[140] *Delimitation of the Maritime Areas Between Canada and France (St. Pierre and Miquelon)*, 31 I.L.M. 1149 (1992).

> *Jan Mayen* is the only case where the location of resources was expressly considered and given some effect on the delimitation line. The Court divided a portion on Jan Mayen's side of the median line into three unequal zones and Zone 1, although comparatively small within the entire region, contained most of the capelin, the high stakes of the dispute. While the Court quantified proportionality to require roughly a two-thirds share in favor of Jan Mayen [*i.e.*, Norway] in Zones 2 and 3, it drew a median line through Zone 1 on the theory that *equitable* access of Denmark to the fishing resources in the circumstances required *equal* access to those areas.[141]

How precisely a tribunal would balance all these considerations in the Aegean context is difficult to predict with any level of certainty, but it can be concluded with some confidence that adjustments would be made to a median line approach, in light of the unique geography and security considerations of this region. One Greek author has acknowledged that "under the present conditions of customary law, neither Greece nor Turkey may expect the exclusive application of their preferred method of delimitation,"[142] and that the locations of the eastern Greek islands "might be considered as relevant circumstances justifying a deviation from the strict median line suggested by Greece."[143] Indeed, Greece itself has departed from a strict median line approach in its boundary delimitation with Italy where "there was an obvious diversion from it at its southernmost part, to the detriment of Greece, and an equally obvious departure from the logic of the baselines in the case of the Gulf of Taranto."[144]

Passage Rights

Turkey's need for a navigational corridor through the Aegean is so central to its security interests that it must be part of any solution to this dispute. Even under the present situation, with Greece claiming a six-nautical-mile territorial sea in the Aegean, Turkey has only limited and narrow routes whereby its ships and planes can pass from Turkish territory into the Mediterranean without passing through or over Greece's territorial sea. If Greece expanded its territorial sea from six to 12 nautical miles, "Turkey would be deprived of a valuable high seas corridor, open at present and running from the Mikonos-Ikaria strait down the Dodecanese islands through to the Karpathos-Rhodes strait."[145] Even Greek scholars have recognized that they can

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[141] Kozyris, *supra* note 111, at 25.
[142] Rozakis, *supra* note 103, at 101.
[143] *Id*.
[144] *Id.* at 91. These modifications apparently "compensated Italy for the full effect that was given to the Greek islands whose position (at least some of them) in the delimitation area was so close to the Greek mainland that it might have justified a slightly different treatment." *Id.*
[145] Politakis, *supra* note 61, at 295.

understand why Turkey would view such an expansion as "a quasi-asphyxiation of its naval interests in the region."[146] Other maritime powers, including the United States and Russia, would also be concerned about limitations on their naval mobility in the region.[147]

If any expansion of the territorial seas around some of the Greek islands were to occur, it would be crucial to ensure that a route is identified through which Turkish ships and planes -- as well as those of third-parties -- can travel as a matter or right. These routes include, of course, the busy routes from the Black Sea and Istanbul into the Mediterranean, but they also include the route from Turkey's second most important port, Izmir. The right of innocent passage would exist through Greece's territorial sea, but this right does not apply to aircraft, submarines exercising the right must surface, and the status of this passage regime in wartime is unclear.

The right of transit passage through international straits would also exist, but it is not entirely clear whether this right is a norm of customary international law, or is rather a right given only to those countries that have ratified the Law of the Sea Convention.[148] It is also not clear whether this right applies to each and every strait or only those designated by the coastal state as permitting such passage. One would think that this right of transit passage would exist at least for the major shipping routes leading from the Turkish Straits into the Mediterranean, but one Greek scholar recently suggested that "[i]t would be reasonable to assume" that "the narrows between the Kos and Astipalaia islands, Amorgos and Kalimnos, Naxos and Patmos, [and] Mikonos and Ikaria," which he characterized as "borderline cases," "fall short of the definition of straits used for international navigation, and consequently would be subject to the more restrictive, innocent passage regime."[149] These "borderline" "narrows" are, in fact, the major and most logical route to get

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[146] *Id*. at 296.

[147] *Id*.

[148] *See id.* at 303 (summarizing scholarly discussion that indicates that all aspects of the transit passage regime have not yet crystallized into customary international law), and Anastasia Strati, *Greece and the Law of the Sea: A Greek Perspective*, in *The Aegean Sea After the Cold War* 89, 94 (Chircop, Gerolymatos and Iatrides eds. 2000)("it is highly questionable whether the LOS Convention provisions on transit passage in all their detail reflect customary law, thereby entitling Turkey to benefit from them").

[149] *Id.* at 301 (citing for support Satya H. Nandan and David H. Anderson, *Straits Used for International Navigation: A Commentary on Part III of the United Nations Covnention on the Law of the Sea*, 60 Brit. Y.B. Int'l L. 179 (1989)); Politakis also acknowledged that the counter-argument can be made, *i.e*., "that all the above-mentioned straits should rather be regarded as organically interconnected, forming continuous maritime routes linking the Mediterranean with the northern Aegean, and thus subject to the transit passage rules." *Id*. at 302.

from the Turkish Strait into the eastern Mediterranean and the many ports in the Middle East.

But opinions are decidely mixed on this topic, and other commentators, neutral to the Aegean region, have observed that "minor" straits, including perhaps those in the Aegean that connect an EEZ or high seas area with a territorial sea, may be governed by the regime of "nonsuspendable innocent passage,"[150] which differs from transit passage because it does not allow submarines to pass submerged nor does it guarantee overflight rights of airplanes.[151] If transit passage will not exist in these straits, then the fears of Turkey and other maritime powers about the consequences of Greece's expansion of its territorial sea from six to 12 nautical miles are indeed justified.

It is also unclear whether the right of transit passage would apply, for instance, to ships leaving Izmir and traveling to the Mediterranean, because the right is defined as applying to "straits which are used for international navigation between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone."[152] A ship departing from Izmir would be leaving from Turkish territorial sea, and would not, therefore, be passing from one area of high seas or EEZ into another.[153] The vessel may not be involved in "international navigation," either, because it may, for instance, be going to a Turkish port on the Mediterranean, such as Antalya, Mersin, or Iskenderun.

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[150] *See*, e.g., Erik Franckx, *The Work of the International Law Association's Committee on Coastal State Jurisdiction Relating to Marine Pollution and Its Implications for the Aegean Sea*, in *The Aegean Sea 2000* at 221, 234 (Bayram Ozturk ed. 2000)(citing Tullio Treves, *Navigation*, in 2 *A Handbook on the New Law of the Sea* 835, 970-76 (1991)).

[151] *Compare* Law of the Sea Convention, *supra* note 70, art. 39(1)(c)(permitting submarines to transit in "their normal modes of continuous and expeditious transit" during transit passage through international straits) with art. 20 (requiring submarines to surface when exercising innocent passage).

[152] Law of the Sea Convention, *supra* note 70, art 37. *See, e.g.*, Politakis, *supra* note 61, at 302: "It is important to note also that although a large interpretation of Arts. 37-38 and Arts. 53-54 might bring some Aegean straits within the ambit of transit passage, it is not at all clear whether ships heading to or departing from Turkish ports on the Aegean coast, such as that of Izmir, could be equally considered as engage in transit passage....[T]he traditional innocent passage regime would still apply to ships entering or clearing certain Turkish ports on the Aegean coast."

[153] One Greek scholar has said that if Greece expands its territorial sea from six to 12 nautical miles, "it would be no longer possible for Turkish warships stationing at Izmir to join the high seas without first passing through Greek territorial waters, and thus subject to the regime of innocent passage." Politakis, *supra* note 61, at 295. Of course, it might be argued, on the other hand, that the definition in Article 37 of the Law of the Sea Convention defines those straits governed by the transit passage regime, without regard to where a particular ship is coming from, or going to.

A final unresolved issue is what the passage rights through the Aegean would be in times of war. An Italian scholar has written that "the status of international straits in time of war has never been completely clarified."[154]

Greece opposed the concept of "transit passage through international straits," when this notion was being developed in the negotiations that led to the 1982 Law of the Sea Convention.[155] And when it signed the Law of the Sea Convention in December 1982, Greece made the following declaration:

> The present declaration concerns the provisions of Part III "on straits used for international navigation" and more especially the application in practice of articles 36, 38, 41 and 42 of the Convention on the Law of the Sea. In areas where there are numerous spread out islands that form a great number of alternative straits which serve in fact on and the same route of international navigation, it is the understanding of Greece, that the coastal State concerned has the responsibility to designate the route or routes, in the said alternative straits, through which ships and aircrafts of third countries could pass under transit passage regime, in such a way as on the one hand the requirements of international navigation and overflight are satisfied, and on the other hand the minimum security requirements of both the ships and the aircrafts in transit as well as those of the coastal State are fulfilled.[156]

This rather feisty declaration (repeated when Greece ratified the Convention in 1995) raises a number of issues, which would become particularly acute if Greece should ever extend its Aegean territorial seas to 12 nautical miles. Greece asserts the right to designate those straits that international shipping (and aircraft) can utilize, but the United States and other maritime powers have argued that the transit-passage right applies to every strait, and that no rights of designation exist. Some commentators have speculated that Greece would like to "prevent Turkish aircraft from flying through straits near the Greek mainland, particularly the Kea Strait southeast of Athens."[157] The Kea Strait may not to be subject to transit passage under the regime established by the Law of the Sea Convention, in any

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[154] Natalino Ronzitti, *The Law of Naval Warfare* 14 (1993).

[155] Anastasia Strati, *Greek Shipping Interests and the UN Convention on the Law of the Sea*, in *Greece and the Law of the Sea* 279 (Theodore C. Kariotis ed., 1997). *See also* Anastasia Strati, *Greece and the Law of the Sea: A Greek Perspective*, in *The Aegean Sea After the Cold War* 89, 92 (Chircop, Gerolymatos and Iatrides eds. 2000)("where Greece's ocean resource and national security interests conflicted with its shipping interests, the former took precedence").

[156] This text is available at <http://www.un.org/Depts/los/los94st.htm>. Turkey protested this statement after it was originally made, and also when it was repeated later. *See* UNCLOS III, 17 *Official Records*, Part B, Doc. A/Conf.62/WS/34, p. 226, and 30 Law of the Sea Bulletin (1996).

[157] Saltzman, *supra* note 13, at 187 n.65.

event, because of the "Messina exception" in Article 38(1), which says that "transit passage shall not apply if there exists seaward of the island a route through the high seas or through an exclusive economic zone of similar convenience with respect to navigational and hydrographical characteristics."

Turkey's contention that the 12-nautical mile limit is not appropriate for tightly congested shared bodies of water is supported by examples from around the globe where countries have claimed less than 12-mile territorial seas. Denmark, for instance, has claimed only a three-nautical-mile territorial sea, and Finland's claim is only four nautical miles.[158]

The closest geographical analogy is found in the Gulf of Finland, where the important Russian port of St. Petersburg (formerly Leningrad) sits at the eastern end, wedged in between Finland in the north and Estonia in the south.[159] Finland has claimed a 12-nautical mile territorial sea generally, but has limited its claim to three nautical miles in the Gulf of Finland to enable Russia to have a corridor for unimpeded access to the Baltic Sea.[160]

Another close analogy is in Northeast Asia, where Japan – which asserts a 12-nautical-mile territorial sea in general -- claims only a three-nautical mile territorial sea in the Soya Strait, the Tsugaru Strait, the eastern and western channels of the Tsushima Strait, and the Osumi Strait.[161]

Similarly, Belize has defined its territorial sea as extending 12 nautical miles from its coast, but has limited the claim to only three nautical miles between the mouth of the Sarstoon River and Ranguana Caye in order to give Guatemala a corridor for unimpeded transit into the Caribbean Sea, pending further negotiations.[162] Another example is provided in the France-Monaco Maritime Delimitation Agreement of 1984 which allocated a 12-nautical-mile corridor to Monaco, to give it direct access to the Mediterranean.[163]

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[158] Kariotis, *supra* note 116, at 206 (citing Robert W. Smith and J. Ashley Roach, *National Claims to Maritime Jurisdiction* (U.S. State Dept. 1995)).

[159] This example and most of those that follow were provided by J. Ashley Roach, of the Office of the Legal Adviser, U.S. Department of State, April 7, 2000. This paragraph and those that follow are adapted from Van Dyke, *Maritime Delimitation*, *supra* note 117, at 167.

[160] For the Finnish legislation, *see* 29 United Nations Law of the Sea Bulletin 56.

[161] Japanese Law on the Territorial Sea No. 30 of May 2, 1977, listed in *National Legislation on the Territorial Sea, the Right of Innocent Passage and the Contiguous Zone* 177-82 (U.N. Sales No. E.95.V.7, 1995); *see also* U.S. Dept. of State, *Limits in the Sea No. 120, Straight Baseline and Territorial Sea Claims: Japan* (1998).

[162] The Belize legislation is at 21 U.N. Law of the Sea Bulletin 3.

[163] France-Monaco Maritime Delimitation Agreement of 1984, 9 U.N. Law of the Sea Bulletin 58.

The Interrelationships Among the Issues

The controversies described above are all important and are all interrelated, but some are clearly more important than others. Crucial to Turkey are its navigational and overflight freedoms, because they are central to Turkey's ability to move goods around and maintain its military readiness. The resource issues have a potential economic importance, and the delimitation of maritime space also has deep symbolic meaning for both countries. Both countries have a stake in the ecological health of the Aegean, and understand that they must cooperate to maintain and improve that environmental sustainability.

The width of the territorial sea (and the associated regulation of the air space) around the Aegean islands and the delimitation of the continental shelf are interrelated, because both impact on Turkey's ability to engage in high seas freedoms. The issues regarding sovereignty over unnamed islands and demilitarization of the Eastern Aegean islands are conceptually different, but Turkish scholars continue to link them to the maritime-space issues, perhaps because they remain as festering disputes and their solution might be appropriately found as part of a "package deal."[164]

Although none of the issues involved are unimportant to the parties, for each the security concerns are paramount, and for Turkey this issue focuses in particular on the free mobility of its naval vessels and planes. If any expansion of the Greek territorial sea is to occur, then the rights of transit passage must be crystal clear. One Greek scholar has suggested that Greece limit its territorial sea claim around those navigational corridors that must be used to move from the Turkish Straits into the Mediterranean.[165] A former Greek diplomat, Ambassador Byron Theodoropoulos, who focused on Turkish and Cypriot affairs during his career, has suggested an approach that would include (1) imposing a 30-50 year moratorium on the delimitation and exploitation of the continental shelf, (2) claiming a 12-nautical-mile territorial sea around only Greek's continental shores, (3) leaving the territorial sea around the Aegean islands at six nautical miles, and (4) "rearranging the width of its air-space accordingly."[166]

This proposed solution is somewhat similar to the views of many outside scholars who have promoted the idea of establishing a joint development zone for some or all of the Aegean that lies beyond the territorial sea.[167] But Ambassador

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[164] *See, e.g.*, Gunduz, *supra* note 2, at 147.

[165] Politakis, *supra* note 61, at 302.

[166] Theodoropoulos, *supra* note 1, at 331. Ambassador Theodoropoulos added that "the various command and control arrangements in the Aegean...are largely meaningless in the post cold-war situation in the Mediterranean." *Id*.

[167] *See, e.g.*, Miyoshi, *supra* note 57, at 92; Martin Pratt and Clive Schofield, *Cooperation in the Absence of Maritime Boundary Agreements: The Purpose and Value of Joint Development*, in *The Aegean Sea 2000* at 152 (Bayram Ozturk ed. 2000); Valencia, Van Dyke, and Ludwig, *supra* note 16, at 183-87; Jon M. Van

Theodoropoulos's approach may be more practical, because it requires less in the way of action by either party at the present time. It would set aside the sovereignty claims for the time being, similar to what has happened to the national claims over Antarctic territory,[168] and would thus freeze territorial claims in the Aegean and recognize the *de facto* sharing of the waters between Greece and Turkey beyond each nation's territorial sea. Neither side would have to forego its claims during such a moratorium, but the passage of time might allow the neighbors to develop greater economic and cultural links, thus promoting a different approach toward settlement when these disputes are reexamined after a generation or two have passed. And, for now, both sides could continue to utilize the Aegean, exercising freedoms of navigation, and cooperating with regard to resource exploration and environmental protection.

[i]The author would like to thank Seth R. Harris, Class of 2001, William S. Richardson School of Law, University of Hawai`i at Manoa, for his assistance with research materials for this paper.

Dyke, *The Role of Islands in Delimiting Maritime Zones: The Case of the Aegean Sea*, in *Ocean Yearbook 8* at 44, 68-69 (E.M.Borgese, N. Ginsburg, and J.R.Morgan eds. 1990).

[168] *See* Valencia, Van Dyke, and Ludwig, *supra* note 16, at 172-80.

THE SIGNIFICANCE OF THE *ERITREA/YEMEN* ARBITRATION FOR THE AEGEAN INSULAR FORMATIONS

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ABSTRACT

The *Eritrea/Yemen* Arbitral Tribunal unanimously resolved in its two Awards the disputed territorial sovereignty over the Red Sea islands, islets, rocks and low-tide elevations (Phase I - 1998) and the delimitation of international maritime boundary (Phase II - 1999) in one of strategically most sensitive regions of the world. The specific holdings of each of the Awards are analyzed in this paper with a view of highlighting their multiple significance for the Aegean Sea insular formations.

The paper surveys landmark progress marked by each of the Awards in the development of principles and rules of international law in the respective subject matters of the Awards. While due attention is paid to the consistency of the Awards with the preceding decisions of the International Court of Justice and arbitral tribunals concerning acquisition of territorial sovereignty and equitable maritime delimitation, distinct features - such as rejection by the 1998 Award of the existence of a principle of reversion of a newly independent state to the ancient title to territory - are also examined. The analysis of the 1999 Award focuses on the complex decision-making process which led the Arbitral Tribunal to equitable delimitation of the Eritrea/Yemen international maritime boundary by means of a single all-purpose boundary. The resultant line substantiates the governing role of equidistance between the opposite states and its adjustment by the factors pertaining to baselines, islands, reefs, low-tide elevations, strategic navigational concerns and interests of the third states concerned. The Tribunal also importantly reappraised the role of resource related factors and the principle of proportionality, while fisheries factors formed part of its resolution of the territorial sovereignty in the 1998 Award, as further defined in the 1999 Award.

INTRODUCTION

I feel particularly honoured to take part in this Symposium both because it concerns the Aegean Sea region which is indeed of unique complexity and importance and because it takes place in a country which seized the World Court in 1931 by the very first case involving sovereignty over islands in the context of maritime boundary delimitation, i.e., the *Italy/Turkey Castellorizo* case. Those of you for whom that case. including its reflection in the *Greece v. Turkey Aegean Sea* case, may be of special interest, will find its overview in Annex attached to my paper in these Proceedings.

Before I shall turn to my topic of "The Significance of the *Eritrea/Yemen* Awards for the Aegean Insular Formations", I would like to briefly comment on that topic's place among the Aegean issues. In particular, the plurality of these often

intertwined issues, which are duly reflected by the programme of our Symposium, led American commentators to suggest two possible approaches.

One of them is that envisaged by Lieutenant Colonel Michael N. Schmitt, who while stressing that the United States has a significant stake in solving the disputes between two of its most important NATO allies, believes that: "Any lasting resolution will inevitably have to address the disputes as an integral whole".[1] An advantage of this approach lies in the fact that give-and-take negotiations are actually often enhanced by a multiplicity and scope of the issues at hand.

Another approach is that suggested by Professor Bernard H. Oxman, who sees the merit in resolving first the strategic aspects of the breadth of the territorial sea and related navigational issues to the satisfaction of as much Turkey and Greece as the user states concerned.[2] This approach seems to be notably appealing in that if the strategic aspects were satisfactorily resolved, the question of equitable maritime boundary delimitation would, as Professor Oxman points out, become mainly, albeit not exclusively, narrowed to an issue concerning the natural resource interests of only Turkey and Greece, and might then be easier to resolve through negotiation or other means.

If the judicial means were chosen under either of the two foregoing approaches, it is in the view of Professor Shabtai Rosenne clear that as a result of the *Aegean Sea* case, the parties would proceed on the basis of a joint submission to the International Court of Justice (ICJ).[3] I would also like to take this opportunity to adjust not entirely accurate perception that "as long as one party insists there is a dispute, there indeed exists a dispute that both parties ought to address".[4] In the paramount *Southern Bluefin Tuna* Award, the Arbitral Tribunal under Presidency of the immediate past ICJ President, Judge Stephen M. Schwebel, authoritatively held that the fact that the applicants maintained, and the respondent denied, that the dispute involved the interpretation and application of the 1982 United Nations Convention on the Law of the Sea did not of itself constitute a dispute over the Convention's interpretation.[5] As did the

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[1]M.N. SCHMITT, The Aegean Angst: The Greek-Turkish Dispute, XLIX *Naval War College Review* 42, 65 (1996/No.3).

[2]B.H. OXMAN, The Application of the Straits Regime Under the UN Convention on the Law of the Sea in Complex Geographic Situations Such as the Aegean Sea, *Proceedings of Conference on The Passage of Ships Through Straits, Athens, 23 October 1999* (in press), advocating as means of such resolution a proper internationally agreed application of Article 36 of the Law of the Sea Convention.

[3]S. ROSENNE, *The World Court: What It Is and How It Works* 213 (1995). Cf. *infra* note 25.

[4]D.S. SALTZMAN, A Legal Survey of the Aegean Issues of Dispute and Prospects for a Non-Judicial Multidisciplinary Solution, in B. OZTURK (ed.), *The Aegean Sea 2000 - Proceedings of the International Symposium on the Aegean Sea, Bodrum, Turkey, 5-7 May 2000* 179, 197 (2000).

[5]*Australia and New Zealand v. Japan Southern Bluefin Tuna (Jurisdiction and Admissibility)* Award of 4 August 2000, President STEPHEN M. SCHWEBEL,

ICJ in like circumstances, the Tribunal had to ascertain whether the violations of the treaty pleaded did or did not fall within the provisions of the treaty and whether, as a consequence, the dispute was one which it had jurisdiction *ratione materiae* to entertain.[6] It observed that in this and in any other case invoking the compromissory clause of a treaty, the claims made, to sustain jurisdiction, must reasonably relate to, or be capable of being evaluated in relation to, the legal standards of the treaty in point, as determined by the court or tribunal whose jurisdiction is at issue. In determining whether the real dispute, which has been submitted to it, did or did not "reasonably (and not just remotely)" relate to the obligations set forth in the treaties whose breach was alleged, the *Southern Bluefin Tuna* Tribunal - like the ICJ - based itself in the instant case not only on the application and final submissions of the parties, but on diplomatic exchanges, public statements and other pertinent evidence.[7] Such approach would undobtedly also be followed by the ICJ or arbitral tribunal seized in the future with the Aegean dispute.

THE DELIVERY OF THE 1998 AND 1999 *ERITREA/YEMEN* AWARDS

The *Eritrea/Yemen* case, which counts among the more important cases in the history of international adjudication and arbitration, was settled by means of two Awards rendered unanimously by the Five-Member Arbitral Tribunal, namely the *Territorial Sovereignty and Scope of the Dispute* Award (Phase I) of 9 October 1998 and the *Maritime Delimitation* Award (Phase II) of 17 December 1999.[8]

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para.48. For the texts of the Award, written and oral pleadings, and the related Press Releases, see the ICSID website <http://www.worldbank.org/icsid>. Cf. B. KWIATKOWSKA, *Southern Bluefin Tuna* Report, 94 *American Journal of International Law* (AJIL) 150-155 (2000), and The *Australia and New Zealand v. Japan Southern Bluefin Tuna (Jurisdiction and Admissibility)* Award of the First Annex VII Arbitral Tribunal, 16 *International Journal of Marine and Coastal Law* (IJMCL) (2001/2, in press).

[6]*Southern Bluefin Tuna* Award, para.48, citing *Oil Platforms (Preliminary Objections)* Judgment, ICJ Reports 1996, 810, para.16; as reaffirmed by the *Legality of Use of Force (Provisional Measures)* Orders in the eight cases with Belgium and Netherlands, para.38, Canada and Portugal, para.37, France, Germany and Italy, para.25, and the United Kingdom, para.33, ICJ Reports 1999 (in press) <http://www.icj-cij.org>.

[7]*Southern Bluefin Tuna* Award, para.48, citing *Spain v. Canada Fisheries (Jurisdiction)* Judgment, President Stephen M. Schwebel, ICJ Reports 1998, 448-449, paras 30-31.

[8]For both Awards, Arbitration Agreement and all other relevant texts, see the PCA's Internet address <http://www.pca-cpa.org>. For the 1998 Award, see also 114 ILR (1999). In accordance with the Arbitration Agreement (Article 16(2)), the Tribunal's President deposited copies of both Awards with the United Nations Secretary-General, the OAU Secretary-General and the Arab League Secretary-General.

The Awards were rendered pursuant to an Arbitration Agreement between the Government of the State of Eritrea and the Government of the Republic of Yemen (hereinafter "the Parties") of 3 October 1996.[9] The Agreement was preceded by Eritrea/Yemen Paris Agreement on Principles of 21 May 1996, which was witnessed by the Governments of France, Ethiopia and Egypt, and a concurrent Joint Statement of the Parties, which emphasized their desire to settle the dispute and "to allow the re-establishment and development of a trustful and lasting cooperation between the two countries", contributing to the stability and peace of the region.[10] The location of the disputed islands, islets, rocks and low-tide elevations in the southern Red Sea, partly along the shipping lanes connecting to the strategically critical Strait of Bab el-Mandeb ("Gate of Lament") and the southern approaches to the Suez Canal, raised a possible threat to international navigation.[11] The hostilities that ended in

[9]The Yemen Arab Republic (YAR) and the People's Democratic Republic of Yemen (PDRY) were formally united in the State of Yemen on 22 May 1990. All treaties concluded between either the YAR or the PDRY and other States and international organizations which were in force on 22 May 1990 remained in effect from that date. In its Declaration made upon signing the 1982 UN Law of the Sea Convention on 10 December 1982, Yemen (YAR) confirmed "its national sovereignty over all the islands in the Red Sea and the Indian Ocean which have been its dependencies since the period when the Yemen and the Arab countries were under Turkish administration". In its Declaration made upon ratifying the Convention on 21 July 1987, Yemen (PDRY) expressed its preference of effecting maritime delimitation of both its mainland and its islands by means of the equidistance. See *UN Law of the Sea Bulletin* 20 and 38 (1994 No.25). YAR's Declaration was objected to on 8 November 1986 by Ethiopia, *id.* 46, stating that this declaration could not "in any way affect Ethiopia's sovereignty over all the islands in the Red Sea forming part of its national territory".

The State of Eritrea became legally independent from the State of Ethiopia in 1993. As of 31 March 2000, Eritrea (and likewise now landlocked Ethiopia) did not ratify either the 1982 UN Law of the Sea Convention or the 1994 Part XI Agreement. See *id.* 4 (2000 No.42). See *infra* notes 64 and 71.

[10]Originally, Egyptian mediation began on 23 December 1995 and continued during Ethiopia's efforts, whereas the French mediation effort was suggested by UN Secretary-General BOUTROS BOUTROS-GHALI in late December that year. See *Report of the Secretary-General on the Work of the Organization*, UN Doc. A/51/1, 20 August 1996, para.766 at 108.

[11]See the Final Communiqué of the Arab League Summit Conference of 23 June 1996, in 35 *International Legal Materials* (ILM) 1280, 1286-7 (1996), welcoming the 1996 Eritrea/Yemen Agreement on Principles as positively reflecting on the "stability of international navigation in the Red Sea". Cf. remarks of S. ROSENNE, *An International Law Miscellany*, Chapter 27: The Strait of Tiran, 723, 725-30 (1993), on the conflict that resulted from occupation by Egypt in the end of 1949, as part of its blockade of the Gulf of Aqaba, of the islands of Tiran and Sanafir (of

December 1995 with Eritrean forces occupying Greater Hanish Island, and Yemeni forces occupying Zuqar, threatened to become an Arab/African conflict, possibly with a recurring Arab/Israeli dimension.[12] Since May 1998, the Eritrean/Yemeni dispute has been paralleled by military clashes over the Yemeni/Saudi Arabian land and sea borders[13] and by a protracted Eritrean/Ethiopian border crisis.[14]

The importance of the *Eritrea/Yemen* case has been matched by the membership of the Arbitral Tribunal. In conformity with the Arbitration Agreement (Article 1), Eritrea appointed as Arbitrators two Members of the International Court of Justice (ICJ), then current President Stephen M. Schwebel and Judge Rosalyn Higgins, and Yemen appointed two of the leading international counsel, Mr. Keith Highet and Dr. Ahmed Sadek El-Kosheri. Following the agreement of the Parties to this effect, on 14 January 1997 the four Arbitrators appointed the Former President of the ICJ, Sir Robert Y. Jennings, as President of the Tribunal. Sir Robert and Dr. El-Kosheri have also served as Judges *ad hoc* (for Britain and Libya respectively) in the pending *Lockerbie* cases. The appointment of ICJ Judges to the *Eritrea/Yemen* Tribunal reflects a longstanding tradition of Members of the World Court acting as Arbitrators in inter-State and other arbitrations; a tradition that has proved to be a valuable means of enhancing the quality and consistency of international jurisprudence.[15] Having been duly constituted, the *Eritrea/Yemen* Arbitral Tribunal

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possibly Saudi Arabian sovereignty) at the entrance to the Strait of Tiran and the Gulf of Aqaba.

[12]Cf. V.L. FORBES, The Geopolitics of Islands: Zuqar and Hanish Archipelagoes, and Press Release No.1 of Zuqar-Hanish Commission, 9 *Indian Ocean Review* 8-11 (1995/March 1996 No.1); D.J. DZUREK, Eritrea-Yemen Dispute Over the Hanish Islands, 4 *IBRU Boundary and Security Bulletin* 70-77 (1996 No.1); DZUREK, The Hanish Islands Dispute, 1 *Eritrean Studies Review* 133-52 (1996 No.2); J.-L. PENINOU, Veillée d'armes en mer Rouge, *Le Monde Diplomatique* 24 (Juin 1996).

13See V.L. FORBES, The Yemen Border Dispute, 7 *Indian Ocean Review* 16-19 (March 1995 No.4); and 6 *IBRU Boundary and Security Bulletin* 22-23 (1998 No.2). See also 1987 Declaration of Yemen, *supra* note 2. After the 1974 Saudi Arabia/Sudan Joint Development Zone Agreement referred to *infra* note 74, the second maritime boundary in the Red Sea was effected by means of Israel/Jordan Maritime Boundary (Gulf of Aqaba) Agreement of 18 January 1996. See J.I. CHARNEY and L.M. ALEXANDER (eds), *International Maritime Boundaries*, Vol.III, 2456-61 (1998).

[14]See J.-L. PENINOU, The Ethiopian-Eritrean Border Conflict, 6 *IBRU Boundary and Security Bulletin* 46-50 (1998 No.2); Statement of the Foreign Ministers of the Five Permanent Members of the Security Council, UN Doc. S/1998/890, para.9 *in fine*, and Statements on the New Ethiopian Map, UN Docs S/1998/956, 977 and 998.

[15]See S. ROSENNE, *The Law and Practice of the International Court, 1920-1996* 413-14 n.95 (Third Edition, 1997); and ROSENNE, The *Jaffa-Jerusalem Railway* Arbitration (1922), 28 *Israel Yearbook on Human Rights* 239, 251 n.26 (1999).

appointed as Registrar Mr. P.J. Hans Jonkman, Secretary-General of the Permanent Court of Arbitration (PCA), and as Secretary Mrs Bette E. Shifman, and fixed the location of the Tribunal's Registry at the PCA International Bureau, The Hague (Peace Palace).[16] In the course of Phase II, Mr. Tjaco T. van den Hout and Mrs Phylis Hamilton became the new PCA Secretary-General and the First Secretary respectively. The place of Arbitration was London.

Under their Arbitration Agreement (Article 2), Eritrea and Yemen requested the Tribunal to rule in two stages. In the first stage, the Tribunal was requested to decide issues of territorial sovereignty in accordance with the principles, rules and practices of international law applicable to the matter, and on the basis, in particular, of historic titles, as well as to decide the scope of the dispute on the basis of the respective positions of the Parties. The Tribunal's Award (Phase I) was followed by the Treaty Establishing the Joint Yemeni-Eritrean Committee for Bilateral Cooperation of 16 October 1998, which testified to restoration of the friendly relations of the Parties.[17] As a result of resumption of military hostilities in the Eritrean/Ethiopian border war,[18] Eritrea - by means of its Application of 16 February 1999 - has initiated proceedings in the ICJ in a dispute with Ethiopia concerning the alleged violation (in the week of 8 February) of the premises and of

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For Biographies of President STEPHEN M. SCHWEBEL and Judge ROSALYN HIGGINS, see the Court's Internet address <http://www.icj-cij.org>, *ICJ Yearbook 1997-1998* 20-21 and 38-40 (No.52); and for that of Judge *ad hoc* AHMED S. EL-KOSHERI, see *id*., 56-57. For Biography of then President SIR ROBERT Y. JENNINGS, see *ICJ Yearbook 1991-1992* 19-20 (No.46). Judge SCHWEBEL was subsequently also elected the President of the *Southern Bluefin Tuna* Arbitral Tribunal, *supra* note 5. Similarly, the new *France/Netherlands* Arbitral Tribunal (PCA) comprises ICJ Judges GUILLAUME and KOOYMANS, Presided over by K. SKUBISZEWSKI of Iran-US Claims Tribunal.

[16]Cf. *97th, 98th and 99th Annual Reports of the Permanent Court of Arbitration* 11, 33 (1997), 11, 35 (1998), and 15, 47 (1999).

[17]See 1999 Award, para.86. The 1998 Yemen/Eritrea Treaty is reproduced in Annex III of that Award. Cf. main text accompanying *infra* note 99.

[18]See UN Docs S/1999/32 and S/RES/1227 (1999); K. VICK, War Erupts Along Border of Ethiopia and Eritrea, *International Herald Tribune* (IHT) of 8 February 1999, 2; Battles Erupt on a 3d Front Between Ethiopia and Eritrea, IHT of 9 February 1999, 2; A.B. POUR, Ethipie-Erythrée, *Le Monde* of 11 February 1999, 3; Addis Ababa Rules Out Border War Cease-Fire, IHT of 11 February 1999, 7; K. Vick, Ethiopians Claim Victory In Border War With Eritrea, IHT of 1 March 1999, 8; S/1999/247, 250, 258-260, 696, 731, 762, 789, 794, 857; S/2000/389, 413, 421, 422, 430, 435, 437, 568, 610, 612, 619, 643 and 676, S/PRST/2000/22 and S/RES/1312 of 31 July 2000, establishing the United Nations Mission in Ethiopia and Eritrea, S/2000/793 and 811. Cf. *supra* note 14.

the staff of Eritrea's diplomatic mission in Addis Ababa.[19] Meanwhile, the second stage of the *Eritrea/Yemen* dispute was settled by the 1999 Award (Phase II), which delimited international Red Sea boundary between the two states, taking into account territorial settlement achieved in the first stage of arbitration, the 1982 UN Convention on the Law of the Sea and other pertinent factors.

On the day of its delivery, the Award was received by the Foreign Minister of Eritrea, Haile Woldense, and the Ambassador to London from Yemen, Dr. Hussein Abdullah El-Amri. In its Press Statement of 20 December 1999, circulated as a document of the United Nations Security Council, the Ministry of Foreign Affairs of Eritrea expressed its gratitude to the French Government for the crucial role played in confidence-building in the early days of the dispute and in conclusion of the Arbitration Agreement.[20] It also expressed appreciation to the British Government and the ICJ for facilitating the *Eritrea/Yemen* proceedings and commended the Award for the manner in which it resolved the dispute "on the basis of international law and the long-term fraternal interests of both peoples and countries".[21] In addition, at his press conference held in Asmara on 21 December 1999, Foreign Minister Woldense stressed that "the legal settlement of the dispute will not only pave the way for a harmonious relationship between the littoral states of the Red Sea, but also opens a new window of opportunity for the consolidation of peace and stability in the region and the creation of a zone of peace, development and mutual benefit".[22] Similarly, the Vice-Minister of Foreign Affairs of Yemen, Abdulla Mohammed Al-Saidi, confirmed on his part that the Award "represents a culmination of a great diplomatic effort and an important historic development in political and diplomatic relations between two neighbouring countries" and "a way

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[19]*ICJ Communiqué* No.99/4, 16 February 1999 <http://www.icj-cij.org>. Since Eritrea's Application provided an instance of the *forum prorogatum*, it was not entered into the Court's General List, and unless and until Ethiopia has given its consent to the Court's jurisdiction, the Court cannot take any action in these proceedings.

[20]Press Release Issued on 20 December 1999 by the Ministry of Foreign Affairs of Eritrea, Tribunal Decides Maritime Boundary Between Eritrea and Yemen in the Red Sea to Constitute Median From Coastlines, UN Doc. S/1999/1265.

[21]*Id*., at 3. See also *Communiqué* of Embassy of Eritrea in Washington D.C. of 20 December 1999
<http://www.africanews.org/...ea/stories/19991220/19991220_feat2.html>.
On the Oral Hearings held at the Foreign and Commonwealth Office in London on 26 January-6 February and 6-8 July 1998, see 1998 Award, paras 8-11; and on those held in the ICJ Great Hall of Justice in the Peace Palace on 5-16 July 1999, see 1999 Award, para.7.

[22]*Communiqué* on Hanish Resolution of Eritrean News Agency of 22 December 1999 <http://www.africanews.org/...ea/stories/19991222/19991222_feat1.html>.

that should be followed for resolving Arab, regional and international disputes".[23] The respective Statements of Eritrea and Yemen reiterated their commitments to fully comply with and to implement the two Awards.[24]

Both the two-stage settlement process[25] and substantial holdings of the *Eritrea/Yemen* Awards are of notable significance for the future settlement in the Aegean Sea. Although by contrast to the latter, the Red Sea area in question does not involve the uniquely difficult presence of islands "on the wrong side of the median (equidistant) line", both the Aegean and the Red Seas belong to strategically most sensitive regions of the world involving innumerous islands, islets, rocks and low-tide elevations between primarily opposite (rather than adjacent) coastal states. The specific holdings of each of the *Eritrea/Yemen* Awards are analyzed below with a view of providing the background for our ensuing discussion of their multiple significance for the Aegean Sea.

THE 1998 *TERRITORIAL SOVEREIGNTY AND SCOPE OF THE DISPUTE* AWARD

The substantial, 528-paragraph *Territorial Sovereignty and Scope of the Dispute* Award (Phase I) is a masterpiece of legal draftsmanship,[26] which reflects the extensive

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[23]Border Verdict [http://www.y.net.ye/yementimes/99/iss51/front.htm] and Interview with Minister Al-Saidi <http://www.y.net.ye/yementimes/99/iss51/intrview.htm>.

[24]See Statements quoted *supra* notes 20-23, as further referred to *infra* notes 91 and 119.

[25]Were the ICJ to be seized of the dispute (*supra* note 3), the territorial and delimitation issues could be combined, as they are in the pending *Qatar v. Bahrain Maritime Delimitation and Territorial Questions (Merits)* and the *Cameroon v. Nigeria Land and Maritime Boundary (Merits)* cases. The ICJ could also be seized separately with those issues, as it occurred in the pending *Indonesia/Malaysia Sovereignty over Pulau Ligitan and Pulau Sipadan* and the *Nicaragua v. Honduras Meritime Delimitation in the Caribbean Sea* cases respectively. Cf. B. KWIATKOWSKA, The Law of the Sea Related Cases in the International Court of Justice During the Presidency of Judge Stephen M. Schwebel (1997-2000), 16 IJMCL 1-40 (2001/1) <http://www.rgl.ruu.nl/english/isep/paper.asp>.

[26]Cf. B. KWIATKOWSKA, Award of the Arbitral Tribunal in the First Stage of the *Eritrea/Yemen* Proceedings, 14 IJMCL 125-136 (1999); P. HAMILTON *et al.* (eds), *The Permanent Court of Arbitration: International Arbitration and Dispute Resolution* 3, 26-27 [J.G. MERRILLS], 196-197 [Summary] (1999); N.S.M. ANTUNES, The *Eritrea/Yemen* Arbitration: First Stage - The Law of Title to Territory Reaverred, 48 *International and Comparative Law Quarterly* (ICLQ) 362-386 (1999); W.M. REISMAN, Case Report on the 1998 *Eritrea/Yemen* Award (Phase I), 93 AJIL 668-682 (1999); J.F. DOBELLE and J.M. FAVRE, Le differend entre l'Erythree et le Yemen, XLIV AFDI 337-355 (1998); A.S. MILLET,

documentary and archival material pleaded in the *Eritrea/Yemen* case.[27] The Award is consistent with the 1928 *USA v. Netherlands Island of Palmas (Miangas)* Award of the sole Arbitrator Max Huber, at the time President of the Permanent Court of International Justice,[28] the 1933 *Denmark v. Norway Legal Status of Eastern Greenland* Judgment[29] and other decisions, admirably appraised by Sir Robert Jennings in his major work on the acquisition of territorial sovereignty.[30] The 1998 *Eritrea/Yemen* Award is structured along eleven Chapters dealing with:

Erythree/Yemen - Court Permanent d'Arbitrage: Sentence du 9 octobre 1998, 103 *Revue Générale de Droit International Public* (RGDIP) 189-192 (1999); G. DISTEFANO, La Sentence Arbitrale du octobre 1998 dans l'affaire du differend insulaire entre le Yemen et l'Erythree, *id.* 851-890.

[27]See 1998 Award, para.440 n.25, noting that each Party submitted over twenty volumes of documentary annexes, as well as extensive map atlases; para.456; and paras 91-94 and 97-99 addressing the issue of evidentiary value of internal memoranda from foreign archives. Maps are examined in the Award's Chapter VIII and para.490 of Chapter X (Conclusions). Yemen submitted as many as 120 and Eritrea 60 maps. The majority of documents were submitted in their original language, and the *Eritrea/Yemen* Tribunal has relied on translations provided by the Parties.

The sheer volume of written and oral pleadings seems comparable to that in the *Libya/Chad Territorial Dispute* case. Cf. S.M. SCHWEBEL, Fifty Years of the World Court: A Critical Appraisal, in *Are International Institutions Doing Their Job?, Proceedings of the 90th ASIL Annual Meeting, Washington D.C., 27-30 March 1996* 339, 345-6 (1997).

For appraisal of the evidentiary value of maps, see the *Botswana/Namibia Kasikili/Sedudu Island* Judgment, President STEPHEN M. SCHWEBEL, paras 81-87, *reprinted in* 39 ILM 310 (2000), as summarized in *ICJ Communiqués* Nos 99/53 and 53bis, 13 December 1999 <http://www.icj-cij.org>; P.H.F. BEKKER, Recent Developments at the World Court, *ASIL Newsletter*, January-February 2000, at 1, 3. For interesting analogies drawn between the *Botswana/Namibia* Judgment and the 1998/1999 *Eritrea/Yemen* Awards, see Ph. WECKEL, Arrêt du 13 décembre 1999, 104 RGDIP 241-248, esp. 241-243 (2000); and P. TAVERNIER, Observations, *id.* 429-444.

For reliance on the *Eritrea/Yemen* holdings related to maps, see the *Qatar v. Bahrain Maritime Delimitation and Territorial Questions (Merits)* Oral Hearings, CR 2000/7, 17, 24 (Counsel Bundy, 31 May 2000), CR 2000/14, 10, 15 (Counsel Sir Elihu Lauterpacht, 13 June), CR 2000/18, 7-8 (Bundy, 21 June 2000) <http://www.icj-cij.org>.

[28]2 UNRIAA 829; 22 AJIL 867 (1928). Cf. 1998 *Eritrea/Yemen* Award, para.104 n.7.

[29]PCIJ Series A/B 1933, No.53, 22.

[30]SIR ROBERT Y. JENNINGS, *The Acquisition of Territory in International Law* (1963). Generally, on importance of judicial consistency, see Statements by the ICJ

* The Setting up of the Arbitration and the Arguments of the Parties (Chapter I);
* The Scope of the Dispute (Chapter II);
* Some Particular Features of this Case (Chapter III);
* Historic Title and Other Historical Considerations (Chapter IV);
* The Legal History and Principal Treaties and Other Legal Instruments Involved, Question of State Succession (Chapter V);
* Red Sea Lighthouses (Chapter VI);
* Evidence of the Display of Functions of State and Governmental Authority (Chapter VII);
* Maps (Chapter VIII);
* Petroleum Agreements and Activities (Chapter IX);
* Clonclusions (Chapter X); and
* *Dispositif* (Chapter XI).

In the last two operative paragraphs 527 and 528 of the Award, the territorial sovereignty over the disputed Red Sea islands was decided as follows:

527. Accordingly, the Tribunal, taking into account the foregoing considerations and reasons, unanimously finds in the present case that:

i. the islands, islets, rocks, and low-tide elevations forming the Mohabbakah Islands, including but not limited to Sayal Islet, Harbi Islet, Flat Islet and High Islet are subject to the territorial sovereignty of Eritrea;

ii. the islands, islets, rocks, and low-tide elevations forming the Haycock Islands, including, but not limited to, North East Haycock, Middle Haycock, and South West Haycock, are subject to the territorial sovereignty of Eritrea;

iii. the South West Rocks are subject to the territorial sovereignty of Eritrea;

iv. the islands, islets, rocks, and low-tide elevations of the Zuqar-Hanish Group, including, but not limited to, Three Foot Rock, Parkin Rock, Rocky Islets, Pin Rock, Suyul Hanish, Mid Islet, Double Peak Island, Round Island, North Round Island, Quoin Island (13°43'N, 42°48'E), Chor Rock, Greater Hanish, Peaky Islet, Mushajirah, Addar Ail Islets, Haycock Island (13°47'N, 42°47'E; not to be confused with the Haycock Islands to the southwest of Greater Hanish), Low Island (13°52'N, 42°49'E) including the unnamed islets and rocks close north, east and south, Lesser Hanish including the unnamed islets and rocks close north east, Tongue Island and the unnamed

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President STEPHEN M. SCHWEBEL to the 53rd and the 54th United Nations General Assembly, UN Doc. A/53/PV.44, 27 October 1998, and UN Doc. A/54/PV.39, 26 October 1999, summarized in *ICJ Communiqués* No.98/33 and No.99/46 <http://www.icj-cij.org>; P.H.F. BEKKER, The 1999 Judicial Activity of the International Court of Justice, 94 AJIL 412, 415 (2000).

islet close south, Near Island and the unnamed islet close south east, Shark Island, Jabal Zuquar Island, High Island, and the Abu Ali Islands (including Quoin Island (14°05'N, 42°49'E) and Pile Island) are subject to the territorial sovereignty of Yemen;

v. the island of Jabal al-Tayr, and the islands, islets, rocks and low-tide elevations forming the Zubayr Group, including, but not limited to, Quoin Island (15°12'N, 42°03'E), Haycock Island (15°10'N, 42°07'E; not to be confused with the Haycock Islands to the southwest of Greater Hanish), Rugged Island, Table Peak Island, Saddle Island and the unnamed islet close north west, Low Island (15°06'N, 42°06'E) and the unnamed rock close east, Middle Reef, Saba Island, Connected Island, East Rocks, Shoe Rock, Jabal Zubayr Island, and Centre Peak Island are subject to the territorial sovereignty of Yemen; and

vi. the sovereignty found to lie with Yemen entails the perpetuation of the traditional fishing regime in the region, including free access and enjoyment for the fishermen of both Eritrea and Yemen.

528. Further, whereas Article 12.1(b) of the Arbitration Agreement provides that the Awards shall include the time period for their execution, the Tribunal directs that this Award should be executed within ninety days from the date hereunder.

While the brevity of this paper prevents me from doing justice to the complexity of considerations and reasons which led the Tribunal to the foregoing conclusions, it may be noted that Eritrea based its claim to the islands on a chain of title extending over more that 100 years, and on principles of effective occupation, and Yemen, in turn, based its claim on original, historic, or traditional Yemeni title. Both parties submitted extensive cartographic evidence, but Eritrea relegated it to a limited role, believing that maps do not constitute direct evidence of sovereignty or of a chain of title. After having reviewed the respective arguments of the parties on territorial sovereignty and on the relevance of petroleum agreements and activities (Chapter I), the Arbitral Tribunal turned to the issue whether the scope of the dispute involved, as Eritrea contended, all the respective Red Sea islands or, as Yemen claimed, only islands of the Hanish Group (Chapter II). The Tribunal preferred the Eritrean view and accordingly decided to make an Award on sovereignty over all the islands, islets, rocks and low-tide elevations with respect to which the Parties have put forward conflicting claims.

It is at this point that the Arbitral Tribunal set out its observations on some particular features of the *Eritrea/Yemen* case (Chapter III). A striking difference between the Parties was that while Yemen traced the dispute back to medieval times, well before the establishment of the Ottoman Empire, Eritrea traced its own title through an historical succession from the Italian colonial period as well as through the post-World War II period of its federation as part of the ancient country of Ethiopia. Accordingly, the Tribunal noted that it had been presented with a large volume of archival and other evidence of the establishment of a legal title through the accumulated

examples of claims, possession or use or, in the case of Yemen, through consolidation, continuity and confirmation of an alleged "ancient title" over the disputed islands, straddling what has been, since the opening of the Suez Canal in 1869, one of the most important and busiest seaways in the world.[31] Since apart from the context of the scope of the dispute,[32] neither of Parties had sought to employ a "critical date" argument, the Tribunal followed the 1966 *Argentina v. Chile Frontier (Rio Palena)* Award and "examined all the evidence submitted to it, irrespective of the date of the acts to which such evidence relates".[33] As regards the principle of *uti possidetis*, relied upon by Yemen and contested by Eritrea, the Tribunal found the sources (internal memoranda) provided by the Parties to be based upon "informed speculation", appearing insufficient as the basis for a legal presumption of that principle, whose application at the time and place pleaded by Yemen (1918, the Middle East) the Tribunal did not accept. In the context of the Tribunal's task in the first stage of the *Eritrea/Yemen* case, the Award gives an important exposition of the meaning of historic title in international law and the applicability of equity or equitable principles to the issues of territorial sovereignty.[34]

Given its mandate under the Arbitration Agreement (Article 2) and the paramount importance attached to "ancient title" by Yemen, the Award reflects careful attention of the Tribunal both to the arguments relating to ancient titles and reversion thereof proposed by Yemen and arguments relating to longstanding attribution of the Mohabbakahs to the colony of Eritrea and to the early establishment of titles by Italy pronounced by Eritrea (Chapter IV). Due attention was also given by the Tribunal to the principal treaties, including the 1923 Lausanne Treaty of Peace (Article 16),[35] and other legal instruments as well as questions of state succession (Chapters V and X, first

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[31]1998 Award, para.93.

[32]1998 Award, paras 86-88, rejecting Yemeni contention of "the critical date" being that of the 1996 Agreement on Principles.

[33]1998 Award, para.95, citing *Argentina v. Chile* Award, 16 UNRIAA 111,115; 38 ILR 16, 20 (1969). Cf. REISMAN, *supra* note 26, at 677-8.

[34]1998 Award, paras 108-113, rejecting the proposition that "the international law governing land territory and the international law governing maritime boundaries are not only different but also discrete, and bear no juridical relevance to each other", but stressing that in the present first stage, there can be no question of even "prefiguring" (as Yemen put it), much less drawing, any maritime boundary line.

[35]1998 Award, para.165, construed Article 16 of the Lausanne Treaty of Peace [28 LNTS 11; 18 AJIL Suppl., 1 (1924)] as follows: "In 1923, Turkey renounced title to those islands over which it had sovereignty until then. They did not become *res nullius* - that is to say, open to acquisitive prescription - by any state, including any of the High Contracting Parties (including Italy). Nor did they automatically revert (insofar as they had ever belonged) to the Imam [Yemen]. Sovereign title over them remained indeterminate *pro tempore*". Cf. S. TOLUNER, Some Reflections on the Interrelation of the Aegean Sea Disputes, in *The Aegean Sea 2000*, *supra* note 4, at 121, 125; SALTZMAN, *supra* note 4, at 185.

section)[36] and the Red Sea lighthouses (Chapter VI).[37] However, neither Party succeeded in persuading the Tribunal of the actual existence of titles as a source of territorial sovereignty over the disputed Red Sea islands; neither on the basis of an ancient title in the case of Yemen, nor of title by succession in the case of Eritrea. And the Award stresses that, "given the waterless and uninhabitable nature of these islands and islets and rocks, and the intermittent and kaleidoscopically changing political situations and interests, this conclusion is hardly surprising".[38] It is important to note that the Award squarely rejects the existence of a principle of reversion of a newly independent State to the ancient title to territory, which Yemen had claimed.[39]

The remaining part of the Award (amounting to half of its length) deals with contentions of the Parties concerning the demonstration of use, presence, display of governmental authority and other ways of showing possession (*effectivités*) which may gradually consolidate into title (Chapters VII-IX and X, second section). A notable result of the analysis of the respective governmental activities drawn in the *Eritrea/Yemen* Award is, as indeed was the case with the 1953 *United Kingdom/France Minquiers and Ecrehos* Judgment, that it is the relatively recent history of use and possession that ultimately proved to be a main basis of the Tribunal's decisions.[40] The voluminous factual evidence, which was put before the Tribunal by Eritrea and Yemen with the view to showing the establishment of territorial sovereignty "by the continuous

[36]The principal instruments included: Agreements of 1883, 1887 and 1888 between Italy and Eritrean leaders, 1911 Treaty of Da'an, 1918 Armistice of Mudros, 1920 Sèvres Treaty of Peace, 1923 Lausanne Treaty of Peace and 1927 Rome Conversations, 1938 Anglo/Italian Agreement on Certain Areas in the Middle East, and 1947 Treaty of Peace with Italy.

[37]The principal treaties included: 1930 Convention on Maintenance of Certain Lights, which did not enter into force, and 1962 International Agreement on Maintenance of Certain Lights in the Red Sea, which expired in March 1990.

[38]1998 Award, para.449. On the nature of the disputed islands, see also paras 93, 124, 239, 497 *in fine*, 503 and 523. Evidence of activities in the waters off the islands and on their land is examined in Chapters VII-IX of the Award. For size and location of the respective islands, see also DZUREK, Eritrea/Yemen Dispute, *supra* note 12, Table at 77.

[39]1998 Award, paras 114, 125 and 441-449. Cf. ANTUNES, *supra* note 26, at 367-9; REISMAN, *supra* note 26, at 681.

[40]1998 Award, para.450, citing ICJ Reports 1953, 47. Cf. *infra* note 95. For reaffirmation of this *Minquiers and Ecrehos* holding, see also the *Western Sahara* Advisory Opinion, ICJ Reports 1975, 43, para.93; *El Salvador/Honduras; Nicaragua Intervening Land, Island and Maritime Frontier Dispute* Judgment, ICJ Reports 1992, 564-565. For reliance on this *Eritrea/Yemen* holding, see *Qatar v. Bahrain (Merits)* Oral Hearings, CR 2000/11, 23-25 (Counsel Sir Elihu Lauterpacht, 8 June 2000) <http://www.icj-cij.org>.

and peaceful display of the functions of State within a given region",[41] was classified by the Tribunal into:

* evidence of intention to claim the islands, as by showing public claims to sovereignty over the islands and by legislative acts seeking to regulate activity on the islands;

* evidence of activities relating to the waters, including licensing of activities in the waters off the islands, fishing vessel arrests, licensing of tourist activity, granting of permission to cruise around or to land on the islands, publication of Notices to Mariners or Pilotage Instructions relating to the waters of the islands, search and rescue operations, maintenance of Naval and Coast Guard Patrols, environmental protection, fishing activity by private persons, and other acts concerning incidents at sea;

* evidence of activities on the islands, including landing parties on the islands, establishment of military posts, construction and maintenance of facilities, exercise of criminal or civil jurisdiction, construction or maintenance of lighthouses, granting of oil concessions, maintenance of limited settlements, overflight and miscellaneous activities (Chapter VII).

In view of the multiple uses and the relevance of maps to the dispute and the significant attention devoted to the legal implications of petroleum agreements and activities of both Parties, these two topics are dealt with separately by the *Eritrea/Yemen* Award (Chapters VIII and IX). In addition, the Tribunal found it necessary to take account of the geographical factor that the majority of the disputed islands, islets and rocks form an archipelago extending across a relatively narrow sea between the opposite coasts of the Parties (Chapter X). Accordingly, the Tribunal gave a certain weight to the presumption that any islands off one of the coasts may be thought to belong by appurtenance to that coast unless the State on the opposite coast has been able to demonstrate a better title.[42] Influence of this presumption could, in Tribunal's view, be seen at work in the legal history of these islands.

Since the different subgroups of islands had, at least to an important extent, separate legal histories, the Arbitral Tribunal felt bound to decide the question of sovereignty with respect to these subgroups separately. At the same time, it rejected the applicability of "the principle of natural or geophysical unity" relied upon by Yemen in relation to the Hanish Group as encompassing the entire island chain, including the Haycocks and the Mohabbakahs.[43]

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[41]1998 Award, para.451, citing the *Palmas* Award, *supra* note 28. See also 1998 *Eritrea/Yemen* Award, para.452, citing the *Eastern Greenland* pronouncement, *supra* note 29, that "[I]t is impossible to read the records of the decisions in cases as to territorial sovereignty without observing that in many cases the tribunal has been satisfied with very little in the way of the actual exercise of sovereign rights, provided that the other State could not make a superior claim".

[42]1998 Award, para.458. For justification of Tribunal's reliance on this factor, see paras 453-457.

[43]1998 Award, paras 459-466 and 470. On the "portico doctrine" recognized as "as a means of attributing sovereignty over offshore features which fell within the

The Tribunal confirmed its earlier finding that there was no evidence that the Mohabbakahs Islands were part of an original historic title held by Yemen and that, even if it were the case that only the Assab Bay islands were passed to Eritrea by Italy in 1947, no serious claims to the Mohabbakahs had been advanced by Yemen since that time, until the events leading up to the present arbitration.[44] Whatever the history, the Tribunal found that in the absence of any clear title to the islands being shown by Yemen, the Mohabbakahs must today be regarded as Eritrean for reason of their location within 12 miles (being the breadth of the territorial sea presently claimed by Eritrea[45]) of Eritrean coast.[46] Although the High Islet lies barely beyond 12 miles (12.72 miles), it was included into the Mohabbakahs on the basis of the unity theory and the Islet's appurtenance to the African coast.[47]

Similarly, the Tribunal was not persuaded by a peculiar legal history of the Haycock Islands (bound up with the history of the Red Sea lighthouses), relying instead on the geographical argument of their proximity to the Eritrean coast and on accord with the general opinion that islands off a coast belong to the coastal state, unless another, superior title can be established, which Yemen had failed to do.[48] The evidence pertaining to petroleum agreements provided additional support for the Tribunal's

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attraction of the mainland", see para.463, citing D.P. O'CONNELL, *The International Law of the Sea* 185 (1982). On Yemen's claim, see also paras 35 and 76. For reliance on the Award's findings related to the "portico doctrine", see *Qatar v. Bahrain (Merits)* Oral Hearings, CR 2000/6, 47 (Counsel Sir Ian Sinclair, 30 May 2000).

[44]1998 Award, para.471.

[45]See *infra* note 64.

[46]1998 Award, para.472, citing D.W. BOWETT, *The Legal Regime of Islands in International Law* 48 (1978) in favour of presumption that islands within territorial sea are under the same sovereignty as the mainland nearby, as enshrined in the 1923 Lausanne Treaty (Article 6); and paras 473-474. See also operative para.527(i) quoted above.

On critical role of this presumption in the 1870 *UK/Portugal Bulama* Award of the US President, see G. GIDEL, *Le Droit International Public de la Mer*, Tome III, 691-2 (1934). Implication to this effect in the *Anglo/Norwegian Fisheries* Judgment, ICJ Reports 1951, 128, was relied upon in *Minquiers and Ecrehos* Pleadings, Vol.I, 424 (UK Reply). Cf. *Anglo/Norwegian Fisheries* Pleadings, Vol.I, 73 (UK Memorial, para.100) and Vol.II, 508-509 (UK Reply, para.209).

For reliance on the *Eritrea/Yemen* Award's holdings in this respect, see *Qatar v. Bahrain (Merits)* Oral Hearings, CR 2000/6, 47-48 (Counsel Sir Ian Sinclair, 30 May 2000), CR 2000/11, 19, 29-30 (Counsel Sir Elihu Lauterpacht, 8 June), CR 2000/15, 45-46 (Counsel Weil, 14 June), CR 2000/18, 20-22 (Sinclair, 21 June), CR 2000/22, 17 (Lauterpacht, 28 June 2000) <http://www.icj-cij.org>.

[47]1998 Award, para.475.

[48]1998 Award, paras 476-480.

decision that the Haycocks are subject to the territorial sovereignty of Eritrea.[49] The South West Rocks were also attributed by the Tribunal to Eritrea on the ground that in the light of their history, it seemed reasonable that the islands should be treated in the same manner as the Mohabbakahs and the Haycocks administered from the African coast.[50]

The remaining disputed islands, islets, rocks, and low-tide elevations, i.e., the Zuqar-Hanish Group[51] as well as the Jabal al-Tayr Island and the Zubayr Group[52] were determined by the Tribunal to be subject to the territorial sovereignty of Yemen. The Tribunal found that the Zuqar-Hanish Group was a particularly difficult group to decide on because, given their location in the central part of the Red Sea, the appurtenance factor was bound to be less helpful, and because any expectation of a definite answer from the Group's earlier legal history - notwithstanding its importance for an understanding of the claims of both Parties - was bound to be disappointed. With respect to the plethora of maps, the Tribunal was of the opinion that Yemen had a marginally better case in that, looked at their totality, the maps suggested a certain widespread understanding that the islands appertained to Yemen.[53]

With a view to making a firm decision about Zuqar and Hanish Islands, the Tribunal had looked at events in the last decade before the 1996 Agreement of Arbitration, including at the Red Sea lighthouses (being evidence of some form of Yemeni presence in the islands), the history of naval patrols and the logbooks (providing no compelling case for either Party), and the petroleum agreements (failing to establish evidence of sovereignty),[54] as well as at various recent instances of the *effectivités*.[55] With respect to the island of Jabal al-Tayr and the Zubayr Group, which are not only relatively isolated, but also are not proximate to either coast, the Tribunal had again to weigh the relative merits of the Parties' evidence of the exercise of governmental authority in the context of both groups having been lighthouse islands and in view of the relevant petroleum agreements.[56] Although there was sparse evidence on either side of actual or persistent activities on and around these islands, the Tribunal was of the opinion that given their isolated location and inhospitable character, little evidence was sufficient.[57]

After examination of all relevant historical, factual and legal considerations, the Arbitral Tribunal found that, on balance, and with the greatest respect for the claims of both Parties, the weight of the evidence supported Yemen's assertions to sovereignty

[49]1998 Award, paras 481-482. See also operative para.527(ii) quoted above.
[50]1998 Award, paras 483-484. See also operative para.527(iii) quoted above.
[51]1998 Award, paras 485-508.
[52]1998 Award, paras 509-524.
[53]1998 Award, para.490.
[54]1998 Award, paras 491-502.
[55]1998 Award, paras 503-507.
[56]1998 Award, paras 509-522.
[57]1998 Award, para.523.

over the Zuqar-Hanish Group[58] and the Jabal al-Tayr Island and the Zubayr Group.[59] The Award stresses an awareness of the Tribunal that: "Western ideas of territorial sovereignty are strange to peoples brought up in the Islamic tradition and familiar with notions of territory very different from those recognized in contemporary international law".[60] Moreover, appreciation of regional legal traditions was necessary to render an Award meeting objectives articulated in the 1996 Joint Statement.[61] Given traditional operation - as the evidence presented to the Tribunal amply testified - of the fishing regime around the islands concerned, the sovereignty found to lie with Yemen was determined as entailing the perpetuation of this regional fishing regime, including free access and enjoyment for the fishermen of both Parties.[62]

THE 1999 *MARITIME DELIMITATION* AWARD

The 169-paragraph *Eritrea/Yemen Maritime Delimitation* Award (Phase II) provides a notable instance of application of the modern law of maritime boundary delimitation, as developed in the equitable jurisprudence of the International Court of Justice and arbitral tribunals.[63] The Award is structured along Introduction and six Chapters dealing with:

* Proceedings in the Delimitation Stage of the Arbitration (Introduction);
* The Arguments of the Parties (Chapter I);
* The General Question of Fishing in the Red Sea (Chapter II);
* Petroleum Agreements and Median Lines (Chapter III);
* The Traditional Fishing Regime (Chapter IV);
* The Delimitation of the International Maritime Boundary (Chapter V); and
* *Dispositif* (Chapter VI).

It is noteworthy that although Eritrea did not ratify the 1982 UN Law of the Sea Convention, it accepted under the Arbitration Agreement (Article 2(3)) the application of the provisions of the Convention, including those which incorporate the relevant elements of customary law, that were relevant to settlement in the Phase II.[64]

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[58]1998 Award, para.508 and operative para.527(iv) quoted above.
[59]1998 Award, para. 524 and operative para.527(v) quoted above.
[60]1998 Award, para.525. Cf. paras 126-132.
[61]See main text accompanying *supra* note 10.
[62]1998 Award, para.526 and operative para.527(vi) quoted above; and main text accompanying *infra* notes 91-118.
[63]For recent appraisal, see B. KWIATKOWSKA, The International Court of Justice and Equitable Maritime Boundary Delimitation, in *International Law and The Hague's 750th Anniversary* 61-72 (1999).
[64]1999 Award, para.130; and *supra* note 9. Eritrea has so far only claimed the 12-mile TS, pursuant to Maritime Proclamation No.137 of 25 September 1953, as Amended in 1956, originally issued by Ethiopia, in *The Law of the Sea - National Legislation on the Territorial Sea, the Right of Innocent Passage and the Contiguous Zone* 122-3 (United Nations 1995). On Eritrea's Proclamation No.7

The Delimitation of the Eritrea/Yemen International Maritime Boundary

A Single All-Purpose Equidistant (Median) Line

In accordance with its mandate under the Arbitration Agreement (Article 2(3)), the *Eritrea/Yemen* Arbitral Tribunal effected the delimitation of the international maritime boundary between the two states by means of a single all-purpose boundary between their territorial seas (TS) and the 200-mile exclusive economic zone and the continental shelves (EEZ/CS). In the last operative paragraph 169 of the Award, this boundary was unanimously defined by a series of geodetic lines, joining 29 points, which were specified in degrees, minutes and seconds of the geographic latitude and longitude, based on the World Geodetic System 1984 (WGS 84), as assisted by a technical expert designated by the Tribunal.[65] The lines and the numbers of the turning points are - as the Arbitration Agreement requested - shown for purpose of illustration only in Charts 3 and 4 in the map section of the Award.

The Tribunal's boundary substantiates the governing role of equidistance as the equitable boundary between the opposite states under both Article 15 (TS) and Articles 74/83 (EEZ/CS) of the Law of the Sea Convention.[66] However, in accordance with the paramount ICJ doctrine of equitable maritime boundary delimitation, the equidistance is not regarded as a legal rule and even between the opposite states, it is drawn by means of but a provisional line which is subject to adjustments required by the variety of special circumstances occurred in a given case. In the present instance, a provisional equidistance was adjusted by the *Eritrea/Yemen* Arbitral Tribunal to factors pertaining to baselines, islands, the immediate neighbourhood of a main international shipping line and interests of any third states (Saudi Arabia and Djibouti). The Award strikes by its avoidance of otherwise frequent confusion of the two distinct concepts of

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(from the *Gazette of Eritrean Laws* of 15 September 1991) providing for the adoption of the Ethiopian 1953/56 Proclamation, see *Oceans and the Law of the Sea - Report of the Secretary-General*, UN Doc. A/52/487, para.63 (1997), *reprinted in* B. KWIATKOWSKA Editor-in-Chief, *International Organizations and the Law of the Sea Documentary Yearbook*, Vol.13-1997, at 27-8 (1999). Yemen, on its part, has claimed the 12-mile TS under its Presidential Resolution No.17 of 30 April 1967, and subsequently - the 12-mile TS, 24-mile contiguous zone, 200-mile EEZ and the continental shelf up to 200 miles or the outer edge of the continental margin, pursuant to its Act No.45 on the Territorial Sea Sea, Exclusive Economic Zone, Continental Shelf and Other Marine Areas of 17 December 1977, in *The Law of the Sea* (1995), *supra*, at 419-22.

[65]1999 Award, paras 5 and 168.

[66]1999 Award, paras 13, 23-24, 51, 116, 124-125, 131-133 and 158, citing (para.13) the *North Sea Continental Shelf* Judgment, ICJ Reports 1969, 36, para.57. For important reaffirmation to this effect in the *Libya/Malta Continental Shelf (Merits)* and *Denmark v. Norway Maritime Delimitation* Judgments, which both involved the opposite coasts, see ICJ Reports 1985, 47, para.62, and 1993, 60, para.50.

the relevant coasts for purposes of delimitation and giving a full, partial or no effect to islands in delimitation. The role of the rocks principle of Article 121(3) of the Convention was not articulated in the Tribunal's decision-making process.[67] While the 1999 Award confirmed the significance and further defined the holding of the 1998 Award concerning perpetuation of the traditional fishing regime in the region referred to further below, the former specified that the fisheries factors were of no effect on the actual course of the Tribunal's boundary line.

A single equidistant (median) line, drawn by the Arbitral Tribunal after careful consideration of all the cogent and skilful arguments advanced by the Parties, differs in some respects both from median line proposed by Yemen and from the two versions of the median (including "historic") line claimed (in combination with "the joint resource area boxes" of the mid-sea disputed islands) by Eritrea.[68] The proposed lines followed different courses and did not coincide, except in the narrow waters of the southernmost portion of the line. Eritrea sought certain support for its "historic median line" - to be drawn without according the mid-sea islands influence on the course of that line - in the finding of the 1998 *Territorial Sovereignty* Award that the offshore petroleum contracts "lend a measure of support to a median line between the opposite coasts of Eritrea and Yemen, drawn without regard to the islands, dividing the respective jurisdiction of the Parties".[69] The Tribunal admitted that the 1998 Award's examination of petroleum arrangements did show repeated reference to a median line between the coasts of Yemen and Eritrea. But this was not the same as saying that the maritime boundary now to be drawn should be drawn throughout its length entirely without regard to the islands whose sovereignty has been determined.[70] Since the concession lines were

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[67]Note that the rocks principle does not govern separate entitlement of islands qualified as "rocks" to the EEZ/CS. Instead, it forms an inherent part of equitable maritime delimitation, in which the variety of entitlement granted or denied to islands, islets and rocks depends on the degree to which they "distort" an equidistant line and other factors, and not on their status as Article 121(3) rocks.

The rocks principle must be dissociated from the baselines issue, in the case of which Article 121(3) rocks should be assimilated to low-tide elevations under Article 13 and should be used as "appropriate points" under Article 7(1) in drawing straight baselines. Similar logic applies to Article 47(1) - particularly in light of its reference to drying reefs - with respect to drawing archipelagic baselines.

[68]On Yemen's median line, see 1999 Award, paras 12-21, 40, 60, 80 and on Eritrea's line, see paras 22-38, 42, 59, 79. See also the Tribunal's comments in paras 113-128; and *infra* notes 96-103. The Yemeni line was plotted with WGS 84 coordinates of the turning points, while Eritrea provided the coordinates of the basepoints only in answer to a question from the Tribunal. See Award, paras 11, 121, 141 and Annex II. On Yemen's preference of using the equidistance in delimitation of all its maritime spaces with adjacent or opposite states, see its 1977 Act No.45 (Article 17), *supra* note 64, as confirmed by its 1982 and 1987 Declarations, *supra* note 9.

[69]1998 Award, para.438, and 1999 Award, paras 75-82 and 132.

[70]1999 Award, para.83.

drawn without regard to uninhabited, volcanic islands when their sovereignty was indeterminate, the Tribunal considered that those lines could hardly be taken as governing once that sovereignty has been determined.

The Arbitral Tribunal drew its single all-purpose equidistant (median) boundary line as far as practicable between the opposite mainland coastlines, while giving careful consideration to the presence of the respective islands. For the purpose of measurement of this equidistance in accordance with definition laid down in Article 15 of the 1982 Convention, the Tribunal preferred the Eritrean argument of measuring it from normal baselines defined in Article 5 by means of the low-water line.[71] The Tribunal paid due attention to navigational considerations, as referred to in the preamble of the Arbitration Agreement expressing conciousness of Eritrea and Yemen of "their responsibilities towards the international community as regards the maintenance of international peace and security as well as the safeguard of the freedom of navigation in a particularly sensitive region of the world", and as already articulated in the 1998 Award.[72]

The international single maritime boundary was constructed by the Tribunal:

* from its northern stretch between turning points 1 and 13, where the boundary divides the Yemeni and the Eritrean EEZ/CS[73] and is entirely a mainland-coastal equidistant (median) line,

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[71]1999 Award, paras 133-135. Eritrea preferred this definition over the high-tide line applicable by virtue of its 1953/56 Maritime Proclamation No.137 (Article 6(f)), referred to *supra* note 64 and relied upon by Yemen, Award, paras 14, 16, 134, 142 and 154. For the 1977 Act No.45 of Yemen, providing for measurement of its TS from the straight baselines or from the low-water line (Article 4), see *supra* note 64. See also *infra* note 74.

For reliance on the Award's holding (para.133) on Article 5, see *Qatar v. Bahrain (Merits)* Oral Hearings, CR 2000/6, 41 (Counsel Sir Ian Sinclair, 30 May 2000) <http://www.icj-cij.org>.

[72]See main text accompanying *supra* notes 11 and 31 and *infra* notes 81, 83, 87, 108-109 and 112. The concern not to affect the status of the high seas or obstruct navigation is also articulated in the 1974 Saudi Arabia/Sudan Joint Development Zone Agreement referred to *infra* note 86. On protests of the United States against navigational claims made by Yemen under its 1967 Resolution No.17 and 1977 Act No.45 (*supra* note 64) and its 1982 and 1987 Declarations (*supra* note 9), see J.A. ROACH and R.W. SMITH, *United Stated Responses to Excessive Maritime Claims* 20, 24, 26, 168 n.9, 260-67, 272-74 (1996); and on the US protest specifically against claims concerning the Strait Bab el-Mandeb, see 298-99, and Map 28 at 295. On significance of navigational factors, see B. KWIATKOWSKA, Economic and Environmental Considerations in Maritime Boundary Delimitations, in *International Maritime Boundaries*, *supra* note 13, Vol.I, at 75, 96-100, and Table at 111-13 (1993).

[73]1999 Award, paras 23, 116 and 131.

* through the middle stretch between turning points 13 and 20, where the boundary also involves the TS delimitation and gives minimal effect to the Zuqar-Hanish Group,

* to the southern sector from turning point 20, where the boundary turns south-eastwards to rejoin the mainland-coastline median line.

Northern Stretch of the Boundary Line

In the northern sector, the Tribunal decided that the western basepoints of its boundary line to be employed on the Eritrean coast shall be on the low-water line of certain of the outer Dahlak Group, comprising "carpet" of some 350 islands and islets, which both Parties were agreed are an integral part of Eritrea's mainland coast, as well as Mojeidi and an unnamed islet east of Dahret Segala.[74] The use of the small uninhabited Negileh Rock (of the Dahlaks) proposed by Eritrea as a basepoint was rejected - in pursuance of Articles 6 and 7(4) of the 1982 Convention - on account of its being a low-tide reef.[75]

With respect to the small single island of Jabal al-Tayr and the group of islands called Zubayr, which were attributed by the 1998 Award to the sovereignty of Yemen, the equidistance proposed by Yemen allowed all these islands full effect, while Eritrea claimed the mainland coastal median line allowing them no effect.[76] In view of "barren and inhospitable nature" of those islands, not constituting a part of Yemen's mainland coast, the Tribunal shared Eritrea's view that they should have no effect upon computing the international boundary line.[77] Consequently, the Tribunal used as the

[74]1999 Award, paras 14, 43, 114, 118, 138-146 and 166. The Tribunal relied upon straight baseline system applicable to the Dahlaks in accordance with the 1953/56 Ethiopian Proclamation, *supra* note 64, and Article 7 of the 1982 Convention. While Table of Claims to Maritime Zones, *UN Law of the Sea Bulletin* 42 n.12 (1999 No.39), specifies that Eritrea claims "archipelagic status" for the Dahlac Archipelago, the 1999 Award notes (in para.142) that the reality or validity or definition of "somewhat unusual straight baseline system" said to be existing for the Dahlaks "is hardly a matter that the Tribunal is called upon to decide". Since both Parties were agreed that Dahlaks "are an integral part of Eritrea'a mainland coast" (Award, para.118), it seems that they do not exemplify archipelagic enclosure around outlying archipelagos, such as those effected by Denmark (the Faeroes), Ecuador (the Galapagos), Norway (Spitzbergen), Spain (the Canaries), Australia (Houtman Abrolhos and Furneaux Islands) or India (Andaman and Nicobar Islands), in contravention of the rule codified in the 1982 Convention that archipelagic straight baselines can only be drawn by the archipelagic states (Article 46-47).

[75]1999 Award, paras 143-145. For reliance thereupon, see *Qatar v. Bahrain (Merits)* Oral Hearings, CR 2000/15, 53 (Counsel Weil, 14 June 2000) <http://www.icj-cij.org>.

[76]1999 Award, paras 15, 115, 121. On sovereignty over those islands attributed by the 1998 Award to Yemen, see *supra* notes 52, 56, 57, 59 and 62.

[77]1999 Award, paras 138 and 147-148.

basepoints for this part of the coast of Yemen several of another "carpet" of islands and islets, which are the beginning of a large island cluster off the coast of Saudi Arabia, including in particular the westernmost extremity of the inhabited and important Kamaran Island, the satellite islets immediately south of Kamaran, as well as the islets of Uqban and Kutama to the north of Kamaran.[78]

Middle Stretch of the Boundary Line

The Tribunal considered that at turning point 13, where its mainland-coastal equidistant (median) line approached the area of possible influence of the islands of the Zuqar-Hanish Group which were determined by the 1998 Award to be subject to the territorial sovereignty of Yemen, some decisions had to be made as to how to deal with this situation.[79]

The Tribunal first decided the question of this middle stretch of the boundary in the narrow seas between the south-west extremity of Yemen's Hanish Group on the one hand and the islands of the Mohabbakahs, High Island, the Haycocks and the South West Rocks, attributed to the sovereignty of Eritrea on the other.[80] Since Yemeni Zuqar-Hanish Islands generated territorial seas which overlapped with those generated by the Eritrean Haycocks and South West Rocks, the question of the TS delimitation was added in this part of the boundary to that of the EEZ/CS delimitation. The Tribunal rejected suggestion of Yemen of giving no effect to those Eritrean islands and leaving them isolated and enclaved outside the Eritrean TS. Apart from "the obvious impracticality of establishing limited enclaves around islands and navigational hazards in the immediate neighbourhood of a main international shipping lane", the Tribunal shared the view of Eritrea that since under Article 121(2) of the 1982 Convention every (high-tide) island is capable of generating a 12-mile TS, a chain of islands (including the Eritrean islands out to the South West Rocks) which are less than 24 miles apart can generate a continuous band of territorial sea.[81] Accordingly, the Tribunal's equidistant (median) line was determined pursuant to the Convention's Article 15 as cutting through the area of overlap of the territorial seas of the Parties.

The Tribunal then turned to the part of the middle stretch of its boundary between turning points 13 and 15, which part was to connect the mainland-coastal equidistant (median) line of the northern stretch and the Article 15 boundary line specified above.[82] While respecting the territorial seas generated by the islands of the Zuqar-Hanish Group, the Tribunal computed a geodetic line joining point 13 with point 14, making the necessary southwestwards excursion to join the median line delimiting

[78]1999 Award, paras 138 and 149-151.
[79]1999 Award, paras 122-123 and 152-153. On sovereignty over those islands attributed by the 1998 Award to Yemen, see *supra* notes 51, 53-55, 58 and 62.
[80]1999 Award, paras 16-17, 21-26, 124-125 and 154-159. On sovereignty over those islands attributed by the 1998 Award to Eritrea, see *supra* notes 43-50.
[81]1999 Award, paras 24-26, 41, 124-125, 128 and 155.
[82]1999 Award, paras 160-162.

the overlapping territorial seas, and drew another geodetic line (near to the putative boundary of Yemeni TS in this area) joining points 14 and 15, where the boundary became the Article 15 median.

Southern Stretch of the Boundary Line

In the southern stretch of a narrow sea having only a few islets and approaching the Bab el-Mandeb, the Tribunal drew a geodetic line which connects turning points 20 and 21, the latter being the intersection of the extended overlapping TS median line and the mainland-coastline median line.[83] As the Bay of Assab is Eritrean internal waters, the controlling basepoints of the boundary line were located seaward of this bay.

Interests of Third States: Northern and Southern End Points of the Boundary Line

Since the Arbitral Tribunal had under the Arbitration Agreement neither competence nor authority to decide on any boundaries between either of the two Parties and neighbouring states, it found it necessary to terminate either end of the Eritrea/Yemen single maritime boundary in such a way as to avoid trespassing upon an area where other claims might fall to be considered.[84] Consequently, the Tribunal was cautious to halt the progress of the boundary line at its northern end point 1 and southern end point 29, which it considered to be well short of where the boundary might be disputed by any third state, in particular by The Kingdom of Saudi Arabia and Djibouti respectively.

As regards the northern terminal point 1, in its Letter to the Tribunal's Registrar of 31 August 1997, Saudi Arabia expressly pointed out that its boundaries with Yemen were indeed disputed, reserved its position, and suggested that the Tribunal should restrict its decisions to areas "that do not extend north of the latitude of the most northern point on Jabal al-Tayr".[85] While Eritrea had no objection to this Saudi Arabian

[83]1999 Award, paras 18, 43, 126-127 and 163.

[84]1999 Award, paras 44-46, 136, 164 and 167. For the latest instance of third state intervention in the practice of the ICJ, see an Order of 21 October 1999, in which the Court, Presided over by Judge STEPHEN M. SCHWEBEL, authorized Equatorial Guinea to intervene in the *Cameroon v. Nigeria Land and Maritime Boundary (Merits)* case as non-party in pursuance of Article 62 of the Statute. See *ICJ Communiqués* No.99/35, 30 June, and No.99/44, 22 October 1999 <http://www.icj-cij.org>; ICJ Reports 1999, in press, *reprinted in* 38 ILM 112 (2000). See also the Court's treatment of the eighth Nigeria's objection in the *Cameroon v. Nigeria (Preliminary Objections)* Judgment, President SCHWEBEL, ICJ Reports 1998, 322-324, and operative para.118(2) at 326.

[85]1999 Award, para.44.

proposal, Yemen wished the determination to extend to the limit of its so-called northern sector.[86]

At the southern end point 29, Djibouti made no representation to the Tribunal, which nevertheless determined the matter *proprio motu*. As the boundary line approached Bab el-Mandeb, it could be complicated by the possible influence of the Perim Island. Therefore, the Tribunal stopped the boundary line short of the place where any such influence would begin to take effect.[87]

The Test of Proportionality

In accordance with the modern law of maritime delimitation as developed by the International Court of Justice and arbitral tribunals and as argued in the *Eritrea/Yemen* case strenuously and ingeniously by both Parties, the Tribunal relied on the test of "a reasonable degree of proportionality" with a view of determining the equitableness of its single equidistant (median) boundary line arrived at by means specified above.[88] The Tribunal was satisfied that its boundary met the test of proportionality, calculated - through its expert in geodesy - on the basis of the ratio of the Eritrea/Yemen's coastal length (measured by reference to their general direction) of 1:1.31 and the ratio of their water areas of 1:1.09.

Mineral Resources Straddling the Boundary Line

The Arbitral Tribunal found itself not to be in a position to accede to Eritrea's request that it determine that "The Eritrean people's historic use of resources in the mid-sea islands includes ... mineral extraction".[89] It is therefore appreciable that with respect to mineral resources which may be discovered that straddle the Eritrea/Yemen

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[86]*Id.* and para.12. See also para.149 (*supra* note 78) and paras 39 and 167 (*infra* note 88); and main text accompanying *supra* note 13. Note that further north extends the Joint Development Zone established in the middle of the Red Sea (and bounded by the 1,000-metre isobath) under the Saudi Arabia/Sudan Agreement of 16 May 1974. See V.L. FORBES, *The Maritime Boundaries of the Indian Ocean Region* 114-16, including Figure 5.3, and 174-5: Map 10 (Singapore University Press 1995).

[87]1999 Award, paras 45-46, noting Eritrea's concern with Yemeni claimed line "slashing" the main shipping channel and causing that channel to be in Yemen's territorial waters. For location of the Perim Island in the context of hypothetical equidistance in the Bab el-Mandeb Strait, see ROACH and SMITH, Map 28, referred to *supra* note 72.

[88]1999 Award, paras 20, 39-43, 117 and 165-168 and jurisprudence quoted therein.

[89]1999 Award, paras 86, 96, 104 and Annex II: Yemen's Answer to Question Put by Judge STEPHEN M. SCHWEBEL on 13 July 1999, in which Yemen maintained that the application of equitable principles to maritime delimitation did not encompass the creation or modalities of "joint resource zones" around Yemeni islands in the manner requested by Eritrea. Cf. *infra* notes 99 and 106.

international maritime boundary or that lie in its vicinity, the Tribunal in any event considered that the Parties are bound to inform and consult one another and to give every consideration to the shared or joint or unitised exploitation of any such resources.[90]

Perpetuation of the Traditional Fishing Regime in the Region

Along with delimitation of the Eritrea/Yemen international maritime boundary, a notable virtue of the 1999 Award (Phase II), commended in all Statements made by the Parties upon its delivery,[91] is confirmation of the significance and further definition of the conclusions of the 1998 Award (Phase I) concerning "the perpetuation of the traditional fishing regime in the region, including free access and enjoyment for the fishermen of both Eritrea and Yemen", around the islands of Jabal al-Tayr, the Zubayr Group and the Zuqar-Hanish Group, which were attributed to the sovereignty of Yemen.[92] This solution was devised in the 1998 Award in application of Islamic tradition of territorial sovereignty construed as distinct from the corresponding Western ideas,[93] and as antedating "the relatively modern, European-derived, concepts of exclusionary sovereignty".[94] The solution had its precedent in the underlying role of

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[90]1999 Award, paras 84-87, citing, *inter alia*, the *North Sea* Judgment, ICJ Reports 1969, 54, para.101(D)(2), as reaffirmed by the *Libya/Malta (Merits)* Judgment, ICJ Reports 1985, 41, para.50; the *North Sea* Separate Opinion of Judge PHILIP C. JESSUP, ICJ Reports 1969, 81-83; and MASAHIRO MIYOSHI, *The Joint Development of Offshore Oil and Gas in Relation to Maritime Boundary Delimitation*, 2 *IBRU Maritime Briefing* (1999 No.5). Cf. Questions of Judge SHIGERU ODA and Judge STEPHEN M. SCHWEBEL of 9 October 1981, in the *Tunisia/Libya* Pleadings, Vol.V, 246, and Replies by Libya of 21 October 1981, at 503-4; KWIATKOWSKA, *supra* note 72, at 86-96, and Table at 111-13; D.M. ONG, Joint Development of Common Offshore Oil and Gas Deposits: "Mere" State Practice or Customary International Law, 93 AJIL 771-804 (1999).

On the 1974 Saudi Arabia/Sudan Agreement, see *supra* note 86; and on the YAR/PDRY Aden Agreement on the Exploration of the Joint Area Between the Two Sectors of Yemen (along their common boundary in the regions of Maarib and Shabwah) of 19 November 1988, see W.T. ONORATO, Joint Development in the International Petroleum Sector: The Yemeni Variant, 39 ICLQ 653-62 (1990).

[91]See Statements of Eritrea and Yemen referred to *supra* notes 20-24.

[92]1998 Award, operative para.527(vi) and paras 525-526, referred to *supra* notes 60-62, as reaffirmed by the 1999 Award, paras 62-69 and 87-112 discussed *infra*.

[93]1998 Award, para.525 (*supra* note 60), as reaffirmed by 1999 Award, paras 85, 92-95. Cf. A.S. EL-KOSHERI, The Interrelation Between Worldwide Arbitral Culture and the Islamic Traditions (para.9), in F. KALSHOVEN (ed.), *The Centennial of the First International Peace Conference 1899-1999* (2000).

[94]1999 Award, para.85. Cf. Statement of President STEPHEN M. SCHWEBEL to the 54th UNGA, *supra* note 30, noting that the international legal order is no longer

fishing interests in the *United Kingdom/France Minquiers and Ecrehos* case where, however, the Parties themselves took initiative of separating fishery issues into a bilateral treaty and of arguing the sovereignty question more purely on its merits.[95]

The holding of the 1998 Award on "the perpetuation of the traditional fishing regime in the region" was of a twofold impact in the second stage of the *Eritrea/Yemen* proceedings. In particular, it raised the question of the precise substantive content and practical implications of this solution on the one hand, and it inclined the Parties to rely on fisheries factors as non-geographical circumstances relevant to maritime boundary delimitation on the other. To Eritrea's question how this traditional fishing regime might be pleaded in the second stage, the Tribunal's President Sir Robert Jennings replied that it was "for Eritrea itself to determine the contents of its written pleadings for that stage".[96] Consequently, Eritrea, which believed that "if this regime is to be perpetuated, the Parties must know what it is and where it holds sway in a technically precise manner", and which characterized this regime "as a sort of *servitude internationale* falling short of territorial sovereignty",[97] proposed fulfilment of that regime by means of "the joint resource area boxes" of the mid-sea disputed islands.[98] The coupling by Eritrea of the traditional fishing regime and the maritime boundary delimitation was in contradistinction to the views of Yemen that the holding in question constituted *res judicata* without prejudice to the maritime boundary, that the Tribunal had not made any finding that there should be joint resource zones, that there had traditionally been no significant Eritrean fishing in the vicinity of the islands concerned, and that the framework created by the 1994 and 1998 Eritrea/Yemen Agreements obviated any need further to take into account the traditional fishing regime in the maritime boundary delimitation.[99] On its part, Eritrea found these Yemen's submissions as conveying the misleading impression that in a follow-up to the 1998 Award, the Parties had agreed

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"Euro-centred". Cf. also *Oceans and the Law of the Sea - Reports of the Secretary-General*, UN Docs A/53/456, para.164 (1998), *reprinted in* KWIATKOWSKA, *supra* note 66, Vol.14-1998 (2000), at 15, 35, noting that by this solution the Tribunal "restricted the sovereignty over the groups of islands awarded to Yemen", and A/55/61, paras 258-264, esp. 262 (2000).

[95]See *supra* note 40; S. ROSENNE, *supra* note 3, at 179-80; B. KWIATKOWSKA, The International Court of Justice and the Law of the Sea - Some Reflections, 11 IJMCL 491, 513 (1996).

[96]1999 Award, paras 3 and 89.

[97]1999 Award, paras 27 and 38, citing 1998 Award, para.126 (*supra* note 60).

[98]1999 Award, paras 27-28, 32-35 (*supra* note 67) and para.89.

[99]1999 Award, paras 29, 36-37, 90, 110-111 and Annex II: Yemen's Answers to Questions Put by Judge STEPHEN M. SCHWEBEL on 13 July and by the Tribunal on 16 July 1999. On the 1998 Agreement, see also *supra* note 17; and on the 1994 Eritrea/Yemen Memorandum of Understanding on Cooperation in the Areas of Maritime Fishing, Trade, Investment and Transportation, signed by Yemen's Minister of Fish Wealth and Eritrea's Minister of Marine Wealth, see also 1999 Award, para.107. Cf. main text accompanying *infra* notes 110 and 115.

upon arrangements to protect or preserve Eritrea's traditional rights in the waters around the mid-sea islands.[100]

In view of the voluminous fisheries evidence which was submitted by the Parties and formed the subject of their strong and differing views, the Tribunal gave the fisheries matters its careful consideration in three Chapters of the 1999 Award, namely Chapter I on The Arguments of the Parties referred to above, Chapter II on The General Question of Fishing in the Red Sea and Chapter IV on The Traditional Fishing Regime.[101] In the second of those Chapters, the Tribunal found on the whole the evidence advanced by the Parties as being to a very large extent "contradictory and confusing", and as not providing any ground - whether related to the historical practice of fishing in general, to matters of asserted economic dependence on fishing, to the location of fishing grounds, or to the patterns of fish consumption by the populations - for accepting, or rejecting, the arguments of either Party on the boundary line proposed by itself or by the other Party.[102] The Award notes that neither Party has succeeded in demonstrating that the line of delimitation proposed by the other would produce a catastrophic or inequitable effect on the fishing activity of its nationals or detrimental effects on fishing communities and economic dislocation of its nationals.[103]

Moreover, the whole point of the Tribunal's 1998 holding on "the perpetuation of the traditional fishing regime" was that "such traditional fishing activity has already been adjudged by the Tribunal to be important to each Party and to their nationals on both sides of the Red Sea", and precisely because of this importance, the fishing practices of the Parties were now not germane to the task of equitable maritime boundary

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[100] 1999 Award, para.30.

[101] 1999 Award, paras 20, 27-38 (Chapter I), paras 47-74 (Chapter II) and paras 87-112 (Chapter IV).

[102] 1999 Award, paras 61 and 72.

[103] *Id*. and paras 50-51 and 59-60, citing (para.50) the test of "economic interests peculiar to the region concerned, the reality and the importance of which are clearly evidenced by long usage", which was incorporated in Articles 7(5) and 47(6) of the 1982 Convention from the *Anglo/Norwegian Fisheries* Judgment, ICJ Reports 1951, 133. Cf. *infra* note 105. See also exception of "catastrophic repercussions" established in the *Canada/USA Gulf of Maine Area* Judgment, ICJ Reports 1984, 342, para.237; as reaffirmed by the *Libya/Malta (Merits)* Judgment, ICJ Reports 1985, 41, para.50, as well as the 1985 *Guinea/Guinea Bissau Delimitation of the Maritime Boundary*, paras 121-123, and the 1992 *Canada/France Delimitation of Maritime Areas*, paras 83-84, Awards; and as relied upon by the *Denmark v. Norway (Jan Mayen)* Judgment, ICJ Reports 1993, 71-2, paras 75-76, criticized in Separate Opinion of Judge SCHWEBEL, 118-20 (who was a Member of the *Gulf of Maine* Chamber). Cf. B. KWIATKOWSKA, Equitable Maritime Boundary Delimitation, as Exemplified in the Work of the International Court of Justice During the Presidency of SIR ROBERT Y. JENNINGS and Beyond, 28 *Ocean Development and International Law* 91, 105-107 (1997).

delimitation.[104] Nevertheless, in Chapter IV of the 1999 Award, the Tribunal found it appropriate to respond to the diverse submissions advanced by the Parties, as they were entitled to do, by providing an important clarification of the substantive content of this holding as follows:

> The traditional fishing regime is not an entitlement in common to resources nor is it a shared right in them. Rather, it entitles both Eritrean and Yemeni fishermen to engage in artisanal fishing around the islands which, in its Award on Sovereignty, the Tribunal attributed to Yemen. This is to be understood as including diving, carried out by artisanal means, for shells and pearls. Equally, these fishermen remain entitled freely to use these islands for those purposes traditionally associated with such artisanal fishing - the use of the islands for drying fish, for way stations, for the provision of temporary shelter, and for the effecting of repairs.[105]

Whereas the Tribunal has received no evidence that the extraction of guano, or mineral extraction more generally, forms part of this traditional fishing regime that has existed and continues to exist today,[106] it found the specific findings on artisanal fishing - as not extending to large-scale industrial fishing, nor to fishing by nationals of thirds states in the Red Sea, whether small-scale or industrial - made in the 1995 FAO Fisheries Infrastructure Development Project Report (concerning fishing in Eritrean waters) to be of general application in the region.[107]

In order that the entitlements of "both Eritrean and Yemeni fishermen to engage in artisanal fishing around the islands", as defined by the Tribunal, be real and not merely theoretical, the 1999 Award further clarifies that the traditional regime has also recognized "certain associated rights". These rights, which are "an integral element of the traditional regime", apply:

* firstly, to free passage for artisanal fishermen that has traditionally existed not only between Eritrea and the islands, but also between the islands and the Yemen coast, and

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[104] 1999 Award, paras 62-69 and 73-74.

[105] 1999 Award, para.103. See also 1998 Award, para.357, characterizing such activities on the part of nationals of both Yemen and of Eritrea (and Ethiopia) in terms of the *Anglo/Norwegian Fisheries* test of "economic interests peculiar to a region" referred to *supra* note 103.

[106] 1999 Award, para.104 (*supra* note 89).

[107] 1999 Award, paras 105-106. On fisheries components of the United Nations Programme for Further Implementation of the Agenda 21 in the Years 1997-2002 and Beyond, including sectoral theme of Oceans and Seas, see UN General Assembly Resolutions 54/31 and 54/32 of 24 November 1999; and *Report of the UN Open-Ended Informal Consultative Process on Oceans and the Law of the Sea, First Meeting, New York, 30 May-2 June 2000*, UN Doc. A/55/274 (2000).

* secondly, to the entitlement to enter the relevant ports, and to sell and market the fish there.[108]

With respect to the right of free passage, the 1999 Award specifies that: "There must be free access to and from the islands concerned - including unimpeded passage through waters in which, by virtue of its sovereignty over the islands, Yemen is entitled to exclude all third Parties or subject their presence to licence, just as it may do in respect of Eritrean industrial fishing".[109] And with respect to the right to enter ports, the Award notes that as it follows from the 1994 Eritrea/Yemen Memorandum identifying the centres of fish marketing on each coast, Eritrean artisanal fishermen fishing around the islands awarded to Yemen have had free access to the Yemeni ports of Maydi, Khoba, Hodeidah, Khokha and Mocha, while Yemeni artisanal fishermen fishing around the islands have had an entitlement to unimpeded transit to and access to the Eritrean ports of Assab, Tio, Dahlak and Massawa.[110] Nationals of the one country are entitled to sell on equal terms and without any discrimination in the ports of the other, and within the fishing markets themselves, the traditional non-discriminatory treatment - so far as cleaning, storing and marketing is concerned - is to be continued. The traditional recourse by artisanal fishermen to the *acquil* system to resolve their disputes *inter se* is to be also maintained and preserved.[111]

The traditional fishing regime is not limited to the territorial waters of the islands concerned, nor is it by its very nature qualified by the maritime zones provided for in the 1982 Law of the Sea Convention, but it operates throughout those waters beyond the territorial waters of each of the Parties, and also in their territorial waters and ports, to the extent and in the manner specified above.[112] Accordingly, the Tribunal found this regime as not depending, either for its existence or for its protection, upon the drawing of the Eritrea/Yemen international maritime boundary.[113] And *vice versa*, nor was the drawing of this boundary conditioned by the holding of the 1998 Award concerning the regime in question.

The Tribunal considered that whereas no further joint agreement is legally necessary for "the perpetuation of the traditional fishing regime in the region" based on mutual freedoms and an absence of unilaterally imposed conditions, Yemen and Eritrea are, of course, free to make mutually agreed regulations for the protection of this

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[108] 1999 Award, para.107.

[109] *Id.* On US protests against Yemen's navigational claims, see *supra* note 72.

[110] 1999 Award, para.107. On importance of the port of Massawa in the fisheries development, see Eritrea: The Start of a Renaissance? *The ACP/EU Courier* 72-3 (November-December 1996 No.160).

[111] 1999 Award, para.107 and 1998 Award, paras 337-340, noting that the rules applied in the *aq'il* system are essentially "elements of private justice derived from and applicable to the conduct of the trade of fishing. They are a *lex pescatoria* maintained on a regional basis by those participating in fishing".

[112] 1999 Award, para.109.

[113] 1999 Award, para.110.

regime.[114] Should they decide that the intended cooperation exemplified by the 1994 Memorandum of Understanding and the 1998 Agreement can usefully underpin the traditional regime, they may use some of the possibilities within these instruments, of which the 1994 Memorandum has a particular pertinence.[115] In so far as environmental considerations may in the future require regulation, the Tribunal was of the view that any administrative measures impacting upon the traditional fishing regime shall be taken by Yemen only with the agreement of Eritrea and, so far as access through Eritrean waters to Eritrean ports is concerned, *vice versa*.[116] The important framework for consultation of environmental issues could be found in the 1982 UNEP Jeddah Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment and its Emergencies Protocol, which, however, were not ratified by Ethiopia, nor so far by Eritrea.[117] Another regional framework, in which maritime authorities of both Eritrea and Yemen (along with those of Ethiopia and 16 other states) do participate is provided by the 1998 Memorandum of Understanding on Port State Control for the Indian Ocean Region.[118]

CONCLUSIONS

The two *Eritrea/Yemen* Awards provide a notable instance of the role of dispute settlement by an international court on the basis of law, including the 1982 UN Law of the Sea Convention as forming an inherent part of the United Nations Programme for Further Implementation of the UNCED Agenda 21 (Chapter 17) in the Years 1997-2002 and Beyond. The Awards unanimously resolved the disputed territorial sovereignty over the Red Sea islands and the delimitation of international maritime

[114]1999 Award, paras 108 and 111.

[115]1999 Award, para.111. In its Answer to Question Put by the Tribunal on 16 July 1999, Yemen quoted Paragraph 1 of the 1994 Memorandum, providing that both Eritrea and Yemen shall permit their fishermen, without limiting their numbers, to fish in the TSs, the contiguous zones and the EEZs of the two countries in the Red Sea (with the exception of the internal waters). Cf. *supra* note 99.

[116]1999 Award, para.108.

[117]For the texts of these instruments, which both entered into force on 20 August 1985 (when they were also ratified by Yemen), see 9 *Environmental Policy and Law* (EPL) 56-60 (1982) and 10 EPL 28-29 (1983); and for the UNEP Plan, see 9 EPL 60-62 (1982), and *Action Plan for the Conservation of the Marine Environment and Coastal Areas of the Red Sea and Gulf of Aden, UNEP Regional Seas Reports and Studies* No.81 (1986). Cf. *Yearbook of International Cooperation on Environment and Development 1999/2000* 152 (Fridtjof Nansen 1999).

[118]See Doc. IOPM 2/8, Appendix 6, Annex 1 (1998). For further information, see the IMO's website <http://www.imo.org; E-mail: info@imo.org>.

boundary, to satisfaction of both Parties and to the benefit of the consolidation of peace and security in one of strategically most sensitive regions of the world.[119]

The 1998 *Eritrea/Yemen Territorial Sovereignty and Scope of the Dispute* Award (Phase I) is a milestone in the development of principles and rules of international law governing the acquisition of territorial sovereignty. The Award confirms the pre-eminence of evidence of actual and effective occupation as a source of title to territory over claims of historic title, as developed by the jurisprudence of the ICJ and other courts and tribunals. It sustains a low standard for what would constitute actual occupation as it relates to unsettled or inhospitable territory. The Award also is significant in its exposition of the modern concept of *effectivités*, which is now considerably expanded in the endeavour to show what Charles de Visscher called "a gradual consolidation of title",[120] and which relies on the relatively recent history of presence and display of governmental authority and other ways of showing possession.
The 1999 *Eritrea/Yemen Maritime Delimitation* Award (Phase II) is a landmark decision substantiating the mutually reinforcing relationship[121] between the jurisprudence of the ICJ and that of arbitral tribunals concerning application and development of the modern law of equitable maritime boundary delimitation, rightly characterized by President Stephen M. Schwebel as being "more plastic than formed".[122] The Award marks a notable progress in the accomodation of the operation of equity *infra legem* with by now crystallized principles and rules of the law of the sea, as codified and progressively developed in the Law of the Sea Convention. It confirms prominence of a single all-purpose maritime boundary and the governing role of equidistance (median line) as the equitable boundary between the opposite states. Thereby, the *Eritrea/Yemen* Award reaffirms pronouncements of the 1993 *Denmark v. Norway (Jan Mayen)* Judgment on uniformity of the effects of the treaty and customary

[119]See the main text accompanying *supra* notes 10-14, 17 and 20-24. On due consideration given by the Arbitral Tribunal to strategically critical navigational interests in the region, see the main text accompanying *supra* notes 31, 72, 81, 83, 87, 108-109 and 112.
[120]1998 Award, para.451.
[121]See the main text accompanying *supra* note 15; KWIATKOWSKA, *supra* note 63, at 62; and J.I. CHARNEY, Is International Law Threatened by Multiple International Tribunals? 271 RCADI 104, 318-20 (1999).
[122]*Gulf of Maine* Separate Opinion of Judge SCHWEBEL, ICJ Reports 1984, 353, 357, as reaffirmed in the *Libya/Malta (Merits)* Dissenting Opinion of Judge SCHWEBEL, ICJ Reports 1985, 187. See also Plenary Address by President STEPHEN M. SCHWEBEL, The Contribution of the International Court of Justice to the Development of International Law, in *International Law*, *supra* note 63, 405, at 411, remarking that: "Whether the salience of equitable considerations in maritime delimitation is sound in law is a matter of controversy. But what is beyond controversy is the influential role played by the Court".

law of equitable maritime delimitation in the case of opposite coasts[123]. The 1999 Award also substantiates the critical roles played in achieving the ultimately equitable result by adjusting the equidistance by factors pertaining to baselines (normal and straight), islands, reefs and low-tide elevations, navigational considerations and interests of third states, as well as by the principle of proportionality in terms of an *a posteriori* test of the equitableness of a result arrived at by other means.

Although the resource related factors did not ultimately influence the actual course of the Eritrea/Yemen single boundary line, the Tribunal's respective holdings importantly reappraise the international legal regime governing common mineral deposits on the one hand[124], and the role of fisheries factors in equitable maritime boundary delimitation on the other. After liberal application of the *Canada/USA Gulf of Maine* exception of "catastrophic repercussions" by the *Denmark v. Norway (Jan Mayen)* Judgment with regard to fisheries factors, the 1999 *Eritrea Yemen* Award marks in particular a detour to more restrictive treatment of this exception, as originally effected in the *Gulf of Maine* Judgment[125].

The fisheries factors were, moreover, taken by the Tribunal into a special account as an inherent part of its resolution of the issue of territorial sovereignty in terms of the operative holding of the 1998 *Eritrea/Yemen* Award concerning "the perpetuation of the traditional fishing regime" around the islands which were attributed to the sovereignty of Yemen. The implementation by Eritrea and Yemen of this regime, of which substantive content was defined in the 1999 Award as applying to artisanal fishing and as involving the right of free passage and other associated rights, will provide an interesting evidence how do the Islamic concepts of territorial sovereignty differ in practice from the corresponding Western ideas[126]. It will also provide an important instance of compliance by the two states with their fundamental obligation to act in good faith, as codified in Article 2(2) of the United Nations Charter and Article 300 of the Law of the Sea Convention, and as reaffirmed in the jurisprudence of the ICJ and other courts and tribunals[127].

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[123]See *supra* note 66; and the *Denmark v. Norway (Jan Mayen)* Judgment, asserting that the equidistance/special circumstances rule of the 1958 UN Continental Shelf Convention (Article 6) "produces much the same result" as an equitable principles/relevant circumstances rule of the customary law, and that likewise the requirements of the 1982 Convention (Articles 74/83 and by analogy, Article 15) reflect those of customary law. See ICJ Reports 1993, 58-9, paras 46-48, and 62-3, paras 55-56, citing (paras 46 and 56) the 1977 *Anglo/French Delimitation of the Continental Shelf* Decision, paras 70 and 148.

[124]See *supra* note 90.

[125]See the main text accompanying *supra* notes 103-104.

[126]See the main text accompanying *supra* notes 93-95. Cf. remarks of WECKEL, *supra* note 27, at 243, on similarity of this *Eritrea/Yemen* approach to that adopted in the 1999 *Botswana/Namibia* Judgment (*supra* note 27).

[127]See *Southern Bluefin Tuna (Jurisdiction and Admissibility)* Award, *supra* note 5, para.64; and *Cameroon v. Nigeria (Preliminary Objections)* Judgment, *supra* note 84, paras 38-39, and jurisprudence quoted therein.

ANNEX

TURKEY/ITALY DELIMITATION OF THE TERRITORIAL WATERS BETWEEN THE ISLAND OF CASTELLORIZO AND THE COAST OF ANATOLIA CASE

PCIJ Series A/B, No.51

President M. Adatci (Japan); *Vice-President* J.G. Guerrero (Salvador); *Judges* Baron Edouard Rolin-Jaequemyns (Belgium), Count Michel Jean César Rostworowski (Poland), D. Anzilotti (Italy), F.J. Urrutia (Colombia), Sir Cecil Hurst (UK), D. Negulesco (Rumania), W. Schücking (Germany), W.J.M. van Eysinga (Netherlands), Wang Ch'ung-hui (China)

Registrar A. Hammarskjöld (Sweden)

Order of 26 January 1933, case discontinued, *id.* 1-6

Order of 30 November 1931, Order of 8 March 1932, Order of 23 June 1932, *Castellorizo* Pleadings [PCIJ Series C, No.61], 33-6

TURKEY *Agent*: Mahmut Essat Bey; ITALY *Minister of Italy at The Hague*: Taliani; *Minister of Foreign Affairs*: Grandi

The *Delimitation of the Territorial Waters Between the Island of Castellorizo and the Coast of Anatolia* case was instituted, under Article 36(1) of the PCIJ Statute, by means of Italy/Turkey Special Agreement of 30 May 1929, which was ratified on 3 August 1931 and filed with the Registry on 18 November 1931. Under the Special Agreement, Turkey, which was then not a member of the League of Nations, undertook to make the declaration accepting the Court's jurisdiction in the *Castellorizo* case in accordance with Article 35(2) of the PCIJ Rules. The Turkish declaration was transmitted to the Registrar together with the text of the Special Agreement.[1] No Agent was appointed by Italy.[2]

The *Castellorizo* was the first case in which the World Court was requested to resolve questions pertaining to sovereignty over islands in the context of the delimitation of the territorial waters, but due to its discontinuance the case remained of

[1] *Castellorizo* Pleadings [PCIJ Series C, No.61], 9-10; Series E [Rapport Annuel], No.8, 106, 255, and No.9, 126; M.O. HUDSON, The Twelfth Year of the Permanent Court of International Justice, 28 AJIL 1, 2 n.2 (1934); M.O. HUDSON, *The Permanent Court of International Justice 1920-1942* 390 (1943). On similar declaration of Turkey in the France/Turkey Special Agreement, see the *SS Lotus* Pleadings [PCIJ Series C, No.13-II], 9, 28. On Turkey's admission to the LN membership on 18 July 1932, see M.O. HUDSON, Admission of Turkey to Membership in the League of Nations, 26 AJIL 813-14 (1932).

[2] *Castellorizo* Pleadings, 22; HUDSON 527, 528 n.11 (1943).

minor importance. It was one of nine cases in total in which proceedings were discontinued by the Permanent Court.[3]

Under their Special Agreement, Italy and Turkey submitted to the Court the question whether, according to the Treaty of Peace of Lausanne of 24 July 1923,[4] the following islets, situated in but a small area of the Aegean Sea, should be assigned, in their entirety, to either of the parties: Volo (Catal Ada), Ochendra (Uvendire), Furnachia (Furnakya), Cato Volo (Katovolo), Prasoudi (Prasudi), Rho (San Giorgio), Maradi, Tchatulata (Catulata), Pighi (Pigi), Dassia (Dasya), Macri (Makri), Psomi, San Giorgio (Aya Yorgi), Polifados, Psoradia (Psoradya), Ipsili, Alimentaria (Alimentarya), Caravola (Karavola), Roccie Vutzachi (Roksi Vucaki), Mavro Poini, and Mavro Poinachi (Mavro Poinaki).[5] In case the Court assigned the whole of these islands to one of the parties or made a division of any kind between the two parties, the Court was requested to adjudge whether measures should be taken, and if so what measures, to safeguard maritime and local needs in the mutual interest of the two states. The Court was also asked to adjudge to which of the parties should, according to the terms of the Treaty of Lausanne, be assigned the island of Kara Ada, situated in the Bay of Bodrum.

On 4 January 1932 Italy and Turkey signed in Ankara an Agreement, which entered into force on 10 May 1933 and related to the sovereignty over islets referred to above and located between the coasts of Anatolia and the islands of Castellorizo and Kara Ada, as well as the delimitation of the territorial waters surrounding those islands in the Aegean Sea.[6]

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[3]Cf. HUDSON 545-6 (1943); I. SCOBBIE, Discontinuance in the International Court: The Enigma of the *Nuclear Tests* Cases, 41 *International and Comparative Law Quarterly* (ICLQ) 808, 814 (1992).

[4]28 LNTS 11; (1923) UKTS No.16/Cmd. 1929, 11; 18 AJIL Suppl., 1, 6-12 (1924); The Treaty of Lausanne provided for the cession to Italy of the Dodecanese Islands which were occupied by Italy in 1912 during the Turkish/Italian War, and confirmed the cession of other islands to Greece which had been effected at the end of the 1913 Balkan Wars. Under Article 12, all the islands in the Eastern Aegean, except Tenedos, Imbros, the Rabbit Islands and the Dodecanese group were ceded to Greece, whereas under Article 15, Turkey ceded the Dodecanese to Italy. Under Article 13 (reprinted in UN Doc. S/12176 of 13 August 1976), the Northern Aegean islands of Lesbos, Chios, Samos and Nikaria were demilitarized. Cf. D.J. HILL, The *Janina-Corfu* Affair, 18 AJIL 98-104 (1924); Q. WRIGHT, The Neutralization of Corfu, *id.* 104-8; WRIGHT, Opinion of Commission of Jurists on *Janina-Corfu* Affair, *id.* 536-44; J.S. ROUCEK, The Legal Aspects of Sovereignty Over the Dodecanese, 38 AJIL 701-6 (1944).

[5]*Castellorizo* Pleadings, 10; M.O. HUDSON, The Tenth Year of the Permanent Court of International Justice, 26 AJIL 25 (1932).

[6]138 LNTS 243; Registered with the Secretariat of the League of Nations, No.3191, 24 May 1933; HUDSON, 28 AJIL 2 (1934).

By Letters of 3 January 1933, on which date the time-limit for filing the Cases utlimately expired, Turkey and Italy informed the Registrar of their intention to terminate the proceedings in the *Castellorizo* case, in consequence of conclusion of the 1932 Ankara Agreement.[7] In view of mutual agreement of the parties to this effect, the Court, by its Order of 26 January 1933 discontinued the proceedings in that case.

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While Article 5(1) of the 1932 Italy/Turkey Ankara Agreement determined "the delimitation of the territorial waters," Article 5(2) added that the line of demarcation had been fixed "in order to determine the sovereignty of the islands and islets located on the one and the other side of that line." According to Scovazzi, this phrase left open the possibility that the line did not delimit maritime boundaries, but rather it merely served to identify the islands in question. Subsequently, under Article 14 of the Treaty of Peace of Paris of 10 February 1947,[8] Italy ceded its sovereignty in Castellorizo and the adjacent (Dodecanese) islets to Greece, but it is in Scovazzi's view doubtful whether the 1932 Ankara Agreement is at present binding on Turkey and Greece.[9] He includes this Agreement to delimitation cases whose present legal status remains uncertain. According to Verzijl, as a result of the 1947 Treaty of Peace of Paris, Greece became the successor of Italy in the 1932 Ankara Agreement, as was confirmed by the survey of the changes in the territorial extent of Greece contained in the *France v. Greece Lighthouses Claims* Award of 27 July 1956.[10]

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[7] *Castellorizo* Pleadings, 29.

[8] 49 UNTS 126; Article 14 reprinted in UN Doc. S/12176 (Turkey's Letter to the UN Secretary-General) of 13 August 1976. The Dodecanese were ceded to Greece on the specific condition that they were to be kept demilitarized. MICHEL STASSINOPOULOS (later designated by Greece as Judge *ad hoc* in the *Aegean Sea Continental Shelf* case) was Political Adviser to Government of the Dodecanese in 1947.

Cf. reference to the Dodecanese in a speech of CONSTANTIN TSALDARIS on 10 June 1946, in the *Corfu Channel* Pleadings Vol.II, 219 (Counter-Memorial of Albania). On the invasion of Greece by Italy (under Mussolini) through the territory of Albania and on the Greek/Albanian state of war, see *id.* 163-240 (Annex 16 a/b, Counter-Memorial of Albania), 249-50 (Reply of UK), Vol.III, 266-7 (Agent Sir Eric Beckett, 11 November 1948), Vol.IV, 557 (Agent Beckett, 18 January 1949). On the alleged involvement of Greece in minelaying in the Corfu Strait, see *id.* Vol.III, 334-5 (Counsel Nordmann, 16 November 1948), Vol.IV, 486-8, 495-7 (Counsel Sir Frank Soskice, 17 January), 630-2 (Counsel Cot, 21 January 1949).

[9] T. SCOVAZZI, Region VIII: Mediterranean and Black Sea Maritime Boundaries, in J.I. CHARNEY and L.M. ALEXANDER (eds), *International Maritime Boundaries* 321, 324 (1993).

[10] RIAA XII, 161; No. 396b/Stuyt; J.H.W. VERZIJL, *The Jurisprudence of the World Court*, Vol. II, 535-6 (Leyden 1966). VERZIJL was the President of the *Lighthouses Claims* Arbitral Tribunal, also comprising A. MESTRE (France) and G.

In the *North Sea Continental Shelf* cases, the 1932 Italy/Turkey Ankara Agreement was considered by Denmark and the Netherlands as exemplifying the use of equidistance in delimitation of territorial waters between the coasts of Anatolia and the island of Castellorizo.[11] This was questioned by the Federal Republic of Germany on the ground that the Italy/Turkey boundary line "contains only a few points of equidistance corrected by straight lines".[12] However, Denmark and the Netherlands countered this German view by maintaining that "it is not uncommon for two States, in applying the equidistance principle, to *agree* for mutual convenience to *simplify* the line by joining straight lines between. The resulting boundary nevertheless remains one based essentially on the application of the equidistance principle".[13]

The entitlement of all the islands of the Dodecanese group (Patmos, Leros, Kalimnos, Kos, Astypalaia, Nisiros, Tilos, Simi, Chalki, Rhodes, Karpathos, Kassos, Lipsi, Castellorizo, Levitha, Arki, Alimia and Agathonision) to the continental shelf (CS) was contended by Greece in its Application filed in the ICJ Registry on 10 August 1976 and instituting proceedings against Turkey in the *Aegean Sea Continental Shelf* case, in which Turkey did not appear.[14] During the Oral Pleadings (Interim Measures), Greece contended on 25 August 1976 that the territorial sea (TS) between Greece and Turkey has been delimited by Article 5 of the 1932 Italy/Turkey Ankara Agreement, which covered the Dodecanese group and which was succeeded to by Greece when it took the cession of the islands under the 1947 Treaty of Peace of Paris.[15] A slight discrepancy in places between the indication of the extent of the Turkish TS in the Dodecanese area and the line of delimitation arose, according to Greece, from the fact that the Turkish TS was 6 miles, whereas the Ankara Agreement provided for all rocks and islets on either side of that line to fall respectively to Turkey and Italy.

In its Note Verbale of 15 March 1976, Turkey reaffirmed that since the Aegean CS delimitation directly affected the vital interests of both states, a mutually acceptable settlement in this respect was "important to maintain the delicate balance established by the Lausanne Peace Treaty of 1923."[16] This was considered by Greece, in the course of the Oral Pleadings (Interim Measures), to be "a totally misleading

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CHARBOURIS (Greece). Cf. D.H. VIGNES, Tribunal Arbitral, Gouvernement Francais (Société Collas et Michel) c/ Gouvernement Hellénique, Sentence du 24-27 juillet 1956, 2 AFDI 416, 420 (1956).

[11]*North Sea Continental Shelf* Pleadings Vol.I, 263-4 (Counter-Memorial of D, Annex 13, B. Territorial Waters: Equidistance Principle), 388 (Counter-Memorial of NL, Annex 15 - *id*.).

[12]*North Sea Continental Shelf* Pleadings Vol.I, 450 (Reply of FRG, Annex, B.Territorial Waters), citing PADWA, 9 ICLQ 633 (1960).

[13]*North Sea Continental Shelf* Pleadings Vol.I, 489 (Common Rejoinder of D/NL).

[14]*Aegean Sea Continental Shelf* Pleadings, 10, and map at 20.

[15]*Aegean Sea Continental Shelf* Pleadings, 88 (Counsel O'Connell).

[16]*Aegean Sea Continental Shelf* Pleadings, 44; and preceding Statement on Turkish Positions by Ambassador SUAT BILGE, Berne, 31 January 1976, *id.* 167-8.

statement" as the Treaty of Lausanne confirmed the cession to Greece of the islands other than the Dodecaneses.[17] The Turkish reference to this Treaty seemed therefore, in Greece's view, to have certain implications for the broadening of the dispute. Greece admitted, however, that both the 1923 Treaty of Lausanne and the 1947 Treaty of Paris could have some bearing on its title to the Aegean CS. This was because the fundamental doctrine attributing the CS *ipso facto* and *ab initio* to the adjacent coastal state[18] yielded the conclusion for the law of state succession that CS rights were transferred, in the respective treaties, to Italy by Turkey (in Lausanne) and then from Italy to Greece (in Paris), along with TS rights. Whereas the matter was one for the merits, Greece drew attention to the fact that in Article 12 of the Treaty of Peace of Lausannne Turkey renounced all rights and titles ("à tous droits et titres, de quelque nature que ce soit") in respect of the ceded territories.

The *Aegean Sea* case did not proceed to the phase of merits, but in its Judgment (Jurisdiction) of 19 December 1978 the Court noted that at the time of accession by Greece on 14 September 1931[19] to the 1928 Geneva General Act for the Pacific Settlement of International Disputes,[20] the Dodecanese group was not in Greece's possession, for those islands were ceded to Greece by Italy only in the 1947 Treaty of Peace of Paris.[21] By analogy to Greece's interpretation of the term "rights" in the General Act (Article 17) in the light of the geogragraphical extent of the modern Greek State (including Dodecanese), and not of its extent in 1931, the Court interpreted Greek "territorial status" reservation to this Act also in the light of the meanwhile occurred evolution of the law concerning the continental shelf.

Whereas tensions between Greece and Turkey have continued through crises which found reflection in their exchanges within the United Nations in the years 1987, 1991 and 1995, a new tension which arose in January 1996 concerned sovereignty over the islets (rocks) of Kardak/Imia located between the Greek island of Kalimnos and the Turkish coast and forming part of the Dodecaneses. The two states based their conflicting claims on the 1932 Italy/Turkey Ankara Agreement and the 1947 Treaty of Peace of Paris.[22] Calamity was avoided only through U.S. mediation and the eventual withdrawal of the troops from the disputed area. Subsequently, both Greece and

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[17] *Aegean Sea Continental Shelf* Pleadings, 92 (Counsel O'Connell, 25 August 1976).
[18] ICJ Reports 1969, 22.
[19] 111 LNTS 414.
[20] Entered into force on 16 August 1929, in 93 LNTS 344; 25 AJIL Supp. 204 (1931).
[21] ICJ Reports 1978, 33. Cf. *North Sea Continental Shelf* Separate Opinion of Judge AMMOUN, ICJ Rep. 1969, 127; Pleadings, Vol.I, 263, 342 (NL Counter-Memorial); *Qatar v. Bahrain (Merits)* Oral Hearings, CR 2000/18, 21-22 (Counsel Sir Ian Sinclair, 21 June 2000).
[22] Cf. D.S. SALTZMAN, A Legal Survey of the Aegean Issues of Dispute and Prospects for a Non-Judicial Multidisciplinary Solution, in B. OZTURK (ed.), *The Aegean Sea 2000, Proceedings of the International Symposium on the Aegean Sea, Bodrum, Turkey, 5-7 May 2000* 179-204, esp. 183-186 (2000).

Turkey claimed an occurrence in their respective waters of the *Derya* incident, which took place in the vicinity of Castellorizo on 22 April 1996.

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As a result of a coup d'etat against President Makarios on 15 July 1974, and despite the UN Security Council Resolution 353 of 20 July, full-scale hostilities broke on 21 July 1974 between the National Guard of Cyprus and the Turkish Army and Turkish Cypriot fighters, and further engaged the Security Council in the ensuing Cyprus crisis.

UN Security Council Resolution 395, adopted by consensus on 25 August 1976, expressed concern over the *MTA Sismik I* incident related tension, appealed to Greece and Turkey "to exercise the utmost restraint", called upon them to resume negotitations, and invited them "to continue to take into account the contribution that appropriate judicial means, in particular the International Court of Justice, are qualified to make to the settlement of any remaining legal differences which they may identify in connexion with their present dispute" (based upon Article 36(3) of the UN Charter).

Greece v. Turkey Aegean Sea Continental Shelf (Request for the Indication of Interim Measures of Protection) Order, ICJ Reports 1976, 3, President E. Jiménez de Aréchaga concurring, Separate Opinion President de Aréchaga, 15, Separate Opinion Vice-President Nagendra Singh, 17, Separate Opinions Lachs, 19, Morozov, 21, Ruda, 23, Mosler, 24, Elias, 27, Tarazi, 31, Dissent Stassinopoulos, 35, *Aegean Sea (Jurisdiction)* Judgment, ICJ Reports 1978, 3, Declarations Gros, 49, Morozov, 54, Separate Opinions Nagendra Singh, 46, Lachs, 50, Tarazi, 55, Dissenting Opinions de Castro, 62, Stassinopoulos, 72; Orders, ICJ Reports 1976, 42, and 1977, 3.

See S. ROSENNE, *The World Court: What It Is and How It Works* 211-213 (1995). Cf. L. GROS, The Dispute Between Greece and Turkey Concerning the Continental Shelf in the Aegean, 71 AJIL 31-59 (1977); A.E. EVANS, The *Aegean Sea (Jurisdiction)* Judgment, 73 AJIL 493-505 (1979); J.B. ELKIND, The *Aegean Sea* Case and Article 41 of the Statute of the International Court of Justice, 32 *Revue Hellenique de Doirt International* 285-345 (1979).

UN Doc. A/CONF.62/WS/26 of 4 May 1982 (Greece), in *UNCLOS III Official Records*, Vol.XVI, 266 (1984), and A/CONF.62/WS/34 of 15 November 1982 (Turkey), Vol.XVII, 226 (1984); Montego Bay Statements of Kirca (Turkey), 189th Meeting-8 December 1982, and Papoulias (Greece), 191st Meeting-9 December 1982, Vol.XVII, 76-78, 110 (1984); Greece's Declaration upon signing the LOSC on 10 December 1982, *UN Law of the Sea Bulletin* 29 (1994 No.25), as responded by Tukey's Statement of 24 February 1983, Vol.XVII *supra*, 242-243; Greece's Declaration upon ratifying the LOSC and Part XI Agreement on 21 July 1995, *UN Law of the Sea Bulletin* 6-7 (1995 No.29), as responded by Turkey's Note of 19 December 1995, *id.* 9 (1996 No.30), as rejoined by Greece's Note of 30 June 1997, *id.* 11 (1997 No.35).

See B. OZTURK (ed.), The Aegean Sea 2000, Proceedings of the International Symposium on the Aegean Sea, Bodrum, Turkey, 5-7 May 2000 (Istanbul 2000). Cf. S. TASHAN (ed.), Aegean Issues: Problems - Legal and Political Matrix (Istanbul 1995); G.P. POLITAKIS, The Aegean Agenda: Greek

National Interests and the New Law of the Sea Convention, 10 International Journal of Marine and Coastal Law (IJMCL) 497-527 (1995); M.N. SCHMITT (US Air Force), The Aegean Angst: The Greek-Turkish Dispute, XLIX Naval War College Review 42-71 (1996/3); C.P. ECONOMIDES, Les ilots d'Imia dans la Mer Egee: Un differend cree par la force, 102 RGDIP 323-389 (1997); E. RAFTOPOULOS, The Crisis over the Imia Rocks and the Aegean Sea Regime, 12 IJMCL 427-446 (1997).

SOME REFLECTIONS UPON MARITIME BOUNDARY DELIMITATON IN THE AEGEAN SEA

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Of the many aspects of maritime boundary delimitation in the Aegean Sea it is the concept itself which has given rise to seminal questions of law. These questions, along with their implications in the political and economic fields, make it difficult for a solution, even a compromise, to be achieved. Indeed, such attempts have been almost always vexed by considerations of political and economic nature. The question is: how far are these considerations pertinent in the delimitation of maritime areas over which states claim sovereignty, or varying degrees of sovereign rights, as the case may be? An examination of the recent decisions by international courts and tribunals reveal an inclination to uphold these considerations; that a delimitation should not affect the parties' rights, off its coasts and in their proximity, in a way which would jeopardise not only their economic interests but also their security in the broadest context.

Maritime boundary delimitation is a determination of the extent to which the states involved are each entitled to areas of the sea. It is a long and detailed process which, in the absence of agreement to the contrary, cannot, of its nature, restrict or extend, let alone extinguish, that entitlement. Detailed rules of law, therefore, become imperative and the adoption of any given system of such law as well as the application of that system to the specific case is a matter the validity of which in relation to other states is subject to international law. This was recognized by the International Court of Justice in the Fisheries Case in the following passage:

"The delimitation of sea areas has always an international aspect; it cannot be dependent merely upon the will of the coastal State as expressed in its municipal law. Although it is true that the act of delimitation is necessarily a unilateral act, because only the coastal State is competent to undertake it, the validity of the delimitation with regard to other States depends upon international law." (Anglo-Norwegian Fisheries Case, I.C.J.Reports, 1951, pp.116, 132.)

The aim of the law of maritime boundary delimitation has always been to lay down rules and principles which are directed at producing equitable results by taking into consideration the geographical features of the area in question.

It is, therefore, important to observe at the outset the geographical features of the Aegean Sea, for it becomes virtually impossible to achieve an equitable delimitation without taking into account the particular relevant circumstances of the area.

The Aegean is a semi-enclosed sea which forms part of the eastern Mediterranean and is surrounded by the Greek mainland coast to the west and the north, the Turkish Anatolian coast in the east and the Greek islands of Crete, Karpathos and Rhodes to the south. It includes over 2800 islands and islets ranging

from the island of Crete, which covers a surface of 8260 sq.km. and contains a population of more than half a million people, to mere rocks and shoals. Except for Imbros, Tenedos and the Rabbit Islands which are located off the entrance to the Dardanelles, the Aegean islands, comprising an area of nearly 18.000 sq.km., belong to Greece. The Aegean Sea is of vital significance to international navigation as it provides the only access to the Black Sea through the Dardanelles Strait. The sea-bed is not uniformly figured. In most parts it lies at a depth of 500 metres. However, north of Crete, the sea-bed falls beyond a depth of 2000 metres.

It is this array of geo-political factors which form the basis of the contesting positions of Greece and Turkey as to how delimitation is to be affected in respect of both the territorial seas and the continental shelf in the Aegean. These geo-political factors also make it difficult to achieve solutions in accordance with the "applicable law". In fact, it is precisely due to the peculiar geo-political features of the Aegean Sea that, despite the now relative abundance of jurisprudence dealing with maritime boundaries, comparison with state and court practice is of limited value.

At present, in view of the adoption by Greece and Turkey of 6 nautical miles of territorial sea,only three sections of the Turkish coast off the Anatolian mainland extend to the full 6 miles as being unaffected by median line reductions. Most of the remaining is drawn according to the median line principle, taking into consideration even the smallest of the Greek islands.The very narrow patch of sea south of the Greek island of Samos is delimited pursuant to the 1932 Agreement between Turkey and Italy and the 1947 Paris Peace Convention.

Any extension of territorial seas in the eastern Aegean beyond six miles would create an even more inequitable position for Turkey, as then more small Greek islands and islets will be taken into consideration in applying the median line criterion by Greece. Greece has already accrued itself the right, by virtue of the UN Law of the Sea Convention, to extend its territorial sea to a 12 mile limit, and if this is realized, it would effectively deny Turkey any off-shore continental shelf, even in the areas where it has, at present, open sections of sea off Tenedos and south of Lesbos and Chios, quite apart, of course, from converting the South Aegean into an extensive Greek "lake" by eliminating the existing patches of the high seas.

Insofar as the width of territorial waters constitute the core of the problems between Greece and Turkey, it is understandable that these states submitted opposing submissions at the Third UNCLOS on the matter of delimitation of the territorial sea where islands interpose. Thus Turkey, in its draft articles concerning territorial sea delimitation, submitted that where the coasts of two or more states are adjacent or opposite, the boundary lines of the territorial sea should be determined by agreement among them "in accordance with equitable principles", and that "in the course of negotiations,the states may apply any one or a combination of delimitation methods appropriate for arriving at an equitable agreement, taking into account special circumstances, including, *inter alia*, the general configuration of the respective coasts and the existance of islands, islets or rocks."[1]

[1] Official Records, Vol.III, p.188; A/Conf.62/C.2/L.9.

Turkey's submission drew upon the judgment by the International Court of Justice in the North Sea Continental Shelf cases in proving that the median or equidistance line was only one of several methods and that it should be recognized that "the existence of islands, islets and rocks conferred special geographical characteristics on the area in which they were situated."[2]

In contrast, Greece submitted that "Where the coasts of two states are opposite or adjacent to each other, neither of the two states is entitled, failing agreement between them to the contrary, to extend its territorial sea beyond the median line, every point of which is equidistant from the nearest baselines, continental or insular, from which the breadth of the territorial seas of each of the two states is measured."[3]

The submission by Greece makes it apparent that, *prima facie*, islands were not to be regarded as "special circumstances" necessitating an abandoment of the equidistance principle. Indeed, "the novel and unacceptable idea" that islands *per se* constitute "special circumstances" was criticised by the Greek delegation.[4]It is interesting to note that the UN Law of the Sea Convention in Article 15 emphasizes the median line in the absence of agreement, but concludes by stating that these provisions shall not apply "where it is necessary by reason of historic title or other special circumstances to delimit the territorial seas" in a way which is "at variance" with them. This article thus makes provision for a deviation from the strict equidistance rule in circumstances where the existence of insular formations lead to inequity.

The presence of islands and the extent to which they can be regarded as constituting special circumstances are relevant questions which require consideration in a more acute form within the context of continental shelf delimitation.

In the Aegean Continental Shelf Case[5], in its initial note verbale to Turkey (7 February,1974)[6], Greece, by reference to the North Sea Continental Shelf cases, affirmed that in narrow waters, where two or more states are opposite or adjacent to each other, the delimitation of the continental shelf in the absence of agreement, and unless another solution is justified by special circumstances, is to be affected by the median line. This "median line" approach taking into account the Greek Aegean islands was once more adopted by Greece during the meeting of experts of The Governments of Greece and Turkey in June 1976[7] although it was conceded that "special circumstances such as rocks and islets which would have a capricious effect on the boundary" could be discounted.

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[2] Official Records, Vol.II, p.104.
[3] A/Conf.62/C.2/L.22.
[4] Official Records, Vol.II, P.111.
[5] I.C.J. Rep. 1976, p.3.
[6] See Annex II of the Application, ibid. pp.32, 34.
[7] See Annex IV of the Application, ibid. p.84.

In its reply, Turkey reiterated that it could not accept the opinion that the delimitation of the continental shelf was based, in theory as in law, on the principle of equidistance and that the essential method was agreement between the states concerned[8]. Furthermore, Turkey stated that "The particular situation of the islands is a second major factor in the problem. In spite of the necessarily general and consequently vague wording of the provisions of the Geneva Convention, the rules established by international practice, as is shown by several agreements which have already been concluded, in fact prohibit the granting of an equal value to all the islands without taking into account their characteristics and their particular situation when it is matter of delimitation of the continental shelf. Both the islands in question and the whole of the Aegean Sea… constitute a typical example of "special circumstances" and for that reason should be appropriately treated with a view to the application of the rules of international maritime law."[9]

In existing state practice, it may seem usual for small islands to be taken into consideration for the purpose of territorial sea delimitation. For example, Greece has utilised several such islands in its Aegean territorial sea delimitations. In like manner, Britain has utilised the islets and rocks of the Minquiers and Ecrehos groups respectively as affecting the equidistance between the Channel Islands and the French coast.

However, where many islands exist randomly in the territorial sea boundary region, the propriety of mere application of equidistance principle, because of its complexity, becomes questionable. In such instances, alternative principles and methods may be used which would result in the equitable distribution of the sea without the attendant complexity of equidistance.

Even in situations where the application of the equidistance principle is tenable, very small insular formations like islets and rocks need not be given full effect on the territorial sea baseline. In such situations, the application of "special circumstances" would mean such a formation being granted only partial effect, depending on its relationship with the opposite or adjacent state.

Similar considerations may apply in situations where small and insignificant insular formations belonging to one state are situated in close proximity to the coast of another state. Here, the utilisation of such islands as basepoints for continental shelf delimitation may result in the other state being deprived of any continental shelf of its own. This is the position in the case of the Greek Aegean islands off Turkey. In situations of this kind, the use of basepoints on the respective mainlands only may lead to a much more equitable result.

[8] See Annex II of the Application, p.37.
[9] ibid. p.39.

TURKISH-GREEK APPROACHES TO RESOLVING THE AEGEAN DISPUTES

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The marked improvement in Turkish-Greek relations that began during the final months of 1999 have raised hopes of resolving the difficult issues in both the Aegean and Cyprus that have bedeviled the relationship between the two neighbours. In particular, the removal of the Greek veto and the affirmation of Turkey's status as a candidate for EU membership at the Helsinki summit in 1999, has generated considerable optimism for conflict resolution. Since their developing rapprochement in late 1999, in the aftermath of the major earthquakes in both Turkey and Greece, the two countries have signed a series of agreements related to economic and cultural ties, border security, organized crime and tourism. An impressive array of contacts have been established by numerous non-governmental organizations that have sought to promote better ties.

In spite of the evident progress in Turkish-Greek relations, however, the settlement of such contentious and complicated issues as those relating to maritime boundaries in the Aegean is by no means assured. The Aegean problems involve vital interests for both countries, and they have serious disagreements on how to resolve them. Indeed, they do not agree on what constitutes legitimate problems that ought to be resolved. Moreover, other problems, particularly the long-standing question of Cyprus remain unresolved. In spite of Turkish resistance and protestations, Greek diplomacy has ensured that the Cyprus question has occupied a position of priority in the international agenda, and has become a factor in Turkey's bid for EU membership. Strictly speaking, Cyprus is not a bilateral Turkish Greek issue; but it has the potential to stall any further improvement in the relations between the two neighbours, and handicap the chances of resolving the Aegean issues.

The enduring rivalry between Turkey and Greece, and the mistrust generated by both old and new issues, will inevitably cast a shadow on the political climate in which the resolution of difficult issues will be considered and attempted. Before the welcome advent of "seismic diplomacy", it is useful to recall that during much of the 1990s, Turkish officials accused Greece of acting against Turkey in virtually every area vital to its interests: Cyprus, the Aegean, European Union (EU) relations, and Kurdish separatism. For their part, Greek leaders accused Turkey of generally assuming a more aggressive stance toward Greece in the post-Cold War era, of making new territorial claims in the Aegean, and obstructing a United Nations-brokered settlement that would re-unify Cyprus.

As much as the past will cast a shadow on the possibilities of settlement of contentious issues, new developments – particularly Turkey's candidacy for EU membership – will ensure that the Aegean and Cyprus issues will remain at the top of the Turkish-Greek diplomatic agenda in the foreseeable future. Turkish leaders

will have to consider their approaches to the Aegean and Cyprus, and how they could reconcile their interests with those of Greece in the foreseeable future. This essay will evaluate Turkish and Greek interests in various issue areas in the Aegean, particularly those involving maritime boundaries, and explore some possible trade-offs between the two countries that could settle their Aegean disputes.

Turkish and Greek Interests and Approaches to the Aegean

Sovereignty issues in the Aegean are vital for Turkey and Greece. The willingness of both Turkish and Greek leaders to consider war on three occasions in the last quarter of the twentieth century over contested sovereignty attests to the enormity of the interests of the two states in the Aegean. Crucial for both countries is sovereign control of substantial maritime and airspace. These are matters of great strategic consequence, and they also relate to their respective entitlements to the resources in the contested seas.

To the great disappointment of Turkish leaders, international maritime laws have been modified seemingly in Greece's favour in recent decades. Article 3 of the 1982 Law of the Sea (LOS) Convention provides for the right of states to establish territorial seas of "a maximum breadth of twelve miles from the baselines"[1]. Greece was one of the first LOS signatories, and the Greek parliament ratified the International Law of the Sea on June 1, 1994. Turkey has not signed LOS and does not intend to do so.

In arguing its case in the Aegean, Greece enjoys the considerable advantage arising from its ownership of virtually all of the 2,200 Aegean islands and islets, some of which are close to Turkey's coast. Thus, as Andrew Wilson pointed out in his 1980 study, *The Aegean Dispute*, with a twelve-mile extension of territorial sea in the Aegean, Greece's sovereign share of the sea would increase from 35 to 64 percent, but – in view of Greek islands in close proximity to the Turkish coast – Turkey's share would only increase from 7.6 to 8.8 percent.[2] In the event of such an extension, the proportion of international waters would drop from 56 percent to 26 percent.[3] It is on these grounds that Ankara has argued that if the territorial seas in the Aegean were to be extended to twelve miles (as they are in the Mediterranean and the Black Sea), the Aegean would in fact become a "Greek lake". In such circumstances Turkey would encounter some difficulties in gaining access to its main ports, Istanbul and Izmir.

The question of the breadth of the territorial sea in the Aegean is the most vital issue for Turkey. This is why successive Turkish governments have warned Greece that an extension by Greece of its territorial sea in the Aegean would

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[1] Tozun Bahcheli, *Greek-Turkish Relations Since 1955* (Boulder: Westview Press, 1990), p. 142.
[2] Andrew Wilson, *The Aegean Dispute* (London: International Institute of Strategic Studies, 1980), p. 27.
[3] Ibid.

constitute a *casus belli*, that is, a justification for war. In view of these warnings, Athens has refrained from doing so. However, Greek leaders have periodically reiterated the position that Greece has the right to increase its Aegean territorial waters to twelve miles, and could do so in the future.

While the territorial sea issue is obviously of critical importance for Turkey, most of the past quarrelling between Athens and Ankara in the Aegean has centered on the continental shelf, the seabed and subsoil of the submarine area beyond the territorial sea, to the point where the land mass is deemed to end. The Greek and Turkish positions on the continental shelf issue may be summarized as follows: Greece has claimed that its islands in the Aegean are entitled to generate their continental shelves and exclusive economic zones (EEZs), and has cited relevant international laws and practice to support its case. Turkey, on the other hand, has claimed that the continental shelf in the eastern Aegean represents the natural extension of the Anatolian peninsula; in accordance with this view, Greek islands of the eastern Aegean lie within the continental shelf of the Turkish landmass.

The delineation of the continental shelf has proved to be an especially difficult and explosive problem. Indeed, it was the Aegean continental shelf issue that nearly sparked a war between the two countries on two occasions, in 1976 and 1987. The territorial sea and continental shelf issues are not unrelated, since all of the shelf claimed by Greece would accrue to it automatically, were it able to implement a twelve-mile territorial claim.

Since Greece considers its case in the Aegean to be stronger on the bases of international law, its approach to the resolution of the continental shelf issue has been legalistic. Athens asserts its entitlement to a twelve mile territorial sea, but has long held that delimitation of the continental shelf requires formal resolution and that the problem must be adjudicated by the International Court of Justice (ICJ) at the Hague. Unlike Athens, which apparently feels confident about its legal position, Ankara fears that its cases on these issues is legally weak and demurs on Athens' desire to pursue an ICJ decision. Ankara's approach to resolving its Aegean maritime boundary problems is driven by a determination generally to avoid the ICJ or indeed any other third party adjudication or arbitration, except "as a last resort". Turkish leaders calculate that they can obtain far better terms in bilateral negotiations with Greece. In accordance with this approach, Ankara strongly resists Greek attempts to "internationalize" (and "Europeanize") Aegean issues.

The EU Factor

Turkish leaders traditionally react angrily to attempts by Athens to enlist the support of its EU partners. It should be recalled that as keen as Turkish leaders have been to advance Turkey's candidacy for EU membership, the Turkish coalition government led by prime minister Bulent Ecevit strongly criticized the statements in the 1999 Helsinki communiqué that endorsed recourse to the ICJ. In the words of the Helsinki *communique*:

> The European Council stresses the principle of peaceful settlement of disputes in accordance with the United Nations Charter and urges candidate states to make every effort to resolve any outstanding border disputes and other related issues. Failing this they should within a reasonable time bring the dispute to the International Court of Justice.
>
> The European Council will review the situation relating to any outstanding disputes, in particular concerning the repercussions on the accession process and in order to promote their settlement through the International Court of Justice, at the latest by the end of 2004.[4]

Some Turkish officials considered these statements – together with a separate assertion that Cyprus' accession would not be conditional on a political settlement on the island – troublesome enough that they counselled the rejection of the EU's offer of candidate status. However, others in Ankara argued that the benefits of Turkish candidacy and prospective membership in the EU far outweighed the handicaps posed by these statements, and their counsel prevailed.

While tilting toward Greece, the Helsinki summit *communique* also seemed to acknowledge Turkish interests. Thus, the EU statement called for the resolution of "any outstanding border disputes and other related issues," in seeming acknowledgement of Ankara's position that there are Aegean issues unrelated to maritime boundaries (e.g. the militarization of Greece's eastern Aegean islands, in apparent violation of international treaties) that require resolution. Moreover, the *communique* called on candidate states to make "every effort" to resolve disputes; Ankara will argue that this underscores the necessity for bilateral negotiations in the resolution of its Aegean disputes with Greece prior to any recourse to the ICJ.

The Helsinki summit declaration has introduced a target date if not a firm deadline for resolving the Aegean disputes. Clearly, the desire to overcome a future Greek veto on its EU membership will provide a strong incentive for Turkey to resolve its Aegean problems. However, as much as possible, Turkish leaders will strive to find solutions to its problems with Greece in a bilateral context. By contrast, Greek leaders are bound to exercise Greece's considerable leverage as an EU member. While this will upset Turkey, Greece's EU partners can help address Turkish fears of pro-Greek bias by engaging in quiet diplomacy to suggest possible Turkish-Greek compromises.

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[4] Helsinki European Council, *Presidency Conclusions*, December 10 and 11, 1999: http//www.europa.eu.int/council/off/conclu/dec99/dec99/_en.pdf

Greek and Turkish Dilemmas: To Negotiate or to Pursue Adjudication

Greek reservations notwithstanding, there are some merits for Turkey and Greece engaging in direct negotiations. Jon M. Van Dyke has enumerated several advantages:

> Direct negotiations … have the advantage of allowing the parties to define the parameters and timetable of the discussion, and to permit issues to be bunched together, with trade-offs in one area possibly offset by gains in another area. Given the complexity and diversity of issues between Greece and Turkey, direct negotiations may be appropriate at least to define and focus the issues. Proposals presented in direct negotiations can be more creative than solutions directed by judicial and arbitral tribunals, and can include, for instance, a joint development or shared zone.[5]

While direct talks (which Turkey wants) have obvious advantages, so does submitting the dispute or disputes to the International Court of Justice (as Greece requires). Such recourse would make it politically easier for both Ankara and Athens to accept concessions that they would otherwise be unable to make.

The challenge in trying to settle Aegean issues is the fact that Greece has proven just as resistant to bilateral negotiations to resolve Aegean issues as Turkey has to submitting its Aegean maritime disputes to the ICJ or other third party arbitration. On the other hand, some Greek governments showed a greater willingness to discuss Aegean issues with Turkey in the past. There were intermittent talks on the Aegean and other issues, particularly after the adoption of the Berne agreement in 1976. These ended with the election of Greece's first Panhellenic Socialist Movement (PASOK) government under the populist Andreas Papandreou in 1981. Talks concerning Aegean issues were briefly revived during the "Davos Process" in 1988 and 1989 but proved inconclusive. Athens has declined Ankara's more recent offers (since 2000) to commence talks on their Aegean disagreements.

Clearly, both governments will incur political risks whichever methods of conflict resolution, or combination of approaches, they might ultimately accept. In Greece, the PASOK government of Costas Simitis, working closely with his new foreign minister George Papandreou, has formulated a policy of greater cooperation with Turkey in the aftermath of the Ocalan debacle in February 1999. On the other hand, it is inevitable that any Greek government will face great political opposition if it abandons the long-time policy of recourse to the ICJ in favour of bilateral negotiations in order to settle Aegean issues. The PASOK government has already

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[5] Jon Van Dyke "Marine delimitation in the Aegean Sea" in Bayram Ozturk (ed.) *The Aegean Sea 2000* (Istanbul: Turkish Marine Research Foundation, 2000), p. 168.

faced significant domestic criticism since late 1999 on the grounds that if has made important concessions to Turkey (viz. by removing its veto on Turkey's candidacy for EU membership) without any *quid pro quo* from Ankara.

Clearly any Turkish government would be subject to similar domestic pressures to those that would face its Greek counterpart, even if Turkey persuaded Greece to undertake substantive negotiations on Aegean issues. Public opinion has been playing a larger role in foreign policy in both countries, and there may thus be greater opportunities for both the Greek and Turkish opposition groups to mobilize opinion against alleged "sellouts".

Possible Compromises

In spite of these risks it is possible to envisage certain circumstances in which Ankara and Athens might consider each other's prescribed method of settlement. For Turkey the prerequisite of any agreement is that Aegean territorial seas and corresponding airspace must be limited to six miles. There are reasonable grounds to believe that Athens is prepared to compromise on this issue, and accept some variation of a six-mile territorial sea in the Aegean.[6] On the other hand, it is clear that Greece will not forfeit its apparent right to a twelve mile territorial sea without a prior concession from Turkey on other Aegean issues, particularly over the delimitation of the Aegean continental shelf.

One potential major trade-off would involve Greek acknowledgement of a six-mile Aegean territorial sea in return for Turkish willingness to submit the Aegean continental shelf issue to the ICJ. To have its case accepted on the territorial sea issue would in fact be a great achievement for Turkey, but there is no certainty that even such a welcome development would prompt Ankara to accept ICJ jurisdiction on the continental shelf issue. Apart from the domestic opposition charges accusing the government of risking vital national interests, Turkish officials will agonize over the risks involved in such adjudication on the basis of international laws. Andrew Wilson estimated that if all the Greece's Aegean islands were entitled to fully generate their continental shelf, as Athens contends, this would confer 97 percent of the Aegean seabed to Greece, leaving Turkey with less than 3 percent.[7] It is this fear of a worst-case scenario that has pitted the Turkish government against recourse to the ICJ.

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[6] Professor Theodore Couloumbis, a prominent Greek scholar suggested the following: "Both Greece and Turkey agree to twelve-mile limits (for both territorial waters and airspace) for their mainland territory, and to six-mile limits for Aegean islands belonging to Greece and Turkey (with the exception of Euboea and Crete, which would enjoy the twelve-mile limit because of their size and distance from Turkey). See Tozun Bahcheli, Theodore A. Couloumbis, Patricia Carley *Greek-Turkish Relations and U.S. Foreign Policy: Cyprus, the Aegean, and Regional Stability* (Washington, D.C.: United States Institute of Peace, 1997), p. 38.

[7] Wilson, *The Aegean Dispute*, p. 27.

On the other hand, some writers have argued that Turkey would fare reasonably well in an ICJ ruling. Jon Van Dyke has argued that "the risks are perhaps not as grave as they seem at the outset, because every adjudication during the past 25 years has left each party with something, always splitting the difference between the claims presented by each side."[8] He also estimated a possible allocation in the following terms:

> If its earlier decisions are followed, the ICJ would probably adopt a solution that allocated to Turkey somewhere between 20 and 41 percent of the Aegean's EEZ and continental shelf, while also protecting its security and navigational interests by ensuring that it has a corridor connecting the Turkish Black Sea Straits to the Mediterranean.[9]

In arguing its case concerning the delimitation of the continental shelf, Ankara has asserted that the ICJ and other arbitration tribunals have granted less than full entitlement of continental shelf to islands in several cases in the past. It has argued that "equity" should be the key principle in finding solutions to Aegean maritime boundary problems. It is on this basis that Ankara has proposed – and Athens has rejected – drawing a median line through the Aegean archipelago, leaving each side with roughly half of the continental shelf.

Any possible agreement on the territorial sea and continental shelf issues in the Aegean will greatly help in tackling other contentious matters (such as the sovereign airspace issue) in the Aegean. The reverse is true as well; solving other Aegean problems may unlock possible deadlocks on maritime boundary issues, and generate greater trust and stability in Turkish-Greek relations.

In spite of Turkish protestations to the contrary, most Greeks believe that Turkey covets at least some of Greece's Aegean islands. Greek suspicions of Turkish intentions were bolstered in 1996 when Ankara challenged Greece over the sovereignty of Kardak-Imia, and made a subsequent policy announcement that there are more than a hundred uninhabited Aegean islets whose legal status is unclear, and thus represent "grey areas" of uncertain sovereignty. Turkish leaders could well assuage Greek fears by assuring Greece more emphatically that it is not bent on a

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[8] Van Dyke, *Maritime delimitation in the Aegean Sea*, p. 169.

[9] Ibid. p. 166. A Greek legal scholar, however, has argued as follows: "With respect to the continental shelf and exclusive economic zone, given the geographical locations, circumstances, and measurements, any adjustments of the median line (championed by Greece) for reasons of equity (relied upon by Turkey), would not significantly extend the Turkish share beyond the Turkish territorial waters except in some small areas in the northern Aegean". See Phaedon John Kozyris "The Legal Dimension of the Current Greek-Turkish Conflict" in Dimitris Keridis & Dimitrios Triantaphyllou *Greek-Turkish Relations in the Era of Globalization* (Dulles, Virginia: Brassey's, 2001), p. 106.

revisionist policy in the Aegean. Indeed, Ankara might consider submitting the issue of islands, islets and formations deemed to represent "grey areas" to the ICJ, as a concession to Greece. Unlike the continental shelf issue which involves far greater stakes, and one where Turkish leaders will display much reluctance for legal adjudication, Turkey has little to lose even if Greek arguments regarding the sovereignty of contested islets etc. in the "grey areas" were fully vindicated.

There are several other possible Turkish concessions that have been previously mentioned in different forums, including the Turkish media: these include the disbanding of the Aegean Army based in Izmir and the removal of landing craft from the Aegean. In its turn, Greece could address Turkish sensitivities concerning Greek management of the FIR, as well as the issue of re-militarization of the eastern Aegean islands in apparent violation of international treaties.

Ultimately, provided Turkish-Greek relations make sustained progress, it should be possible to create a balanced regime in the Aegean that both meets vital Turkish and Greek interests and is saleable to public opinion in both countries. Several prominent observers have described the broad outlines of a Turkish-Greek compromise in the Aegean. Thus, Ambassador Monteagle Stearns, a long-time observer of Greek-Turkish relations, has called for:

> ... a regime in the Aegean that respects the sovereignty of Greece over its islands, that satisfies Turkish concerns over freedom of navigation, that enables both countries to explore and exploit the resources of the Aegean shelf on an equitable basis, and that assures third parties that their rights of innocent passage will not be jeopardized by hostilities between Greece and Turkey.[10]

Prospects

The recent rapprochement between Turkey and Greece recalls previous initiatives to bring about reconciliation, and a resolution of disputes between the two Aegean neighbours. One such attempt occurred in the late 1980s. Together with Andreas Papandreou, his Greek counterpart, Turkish prime minister Turgut Ozal launched the "Davos process" in 1988 to tackle and resolve Turkish-Greek problems. But the Davos initiative failed to yield any major breakthroughs. The domestic political weakening of both leaders soon afterwards spelled the end of the "Davos spirit" by the following year.

The Davos initiative failed in part because public opinion in both countries did not appreciate the "top down" approach of their leaders. By contrast, after the Turkish and Greek earthquakes of August and September 1999, public opinion in both countries has displayed a strong desire for improved relations. Moreover, the current governments in Ankara and Athens have developed a better working

[10] Monteagle Stearns "The Security Domain: A U.S. Perspective" in Ibid., p. 244.

relationship. The Turkish leaders' strong desire for Turkey's EU membership, and the apparent interest of the Greek government to support Turkey's EU membership (thus forsaking its earlier policy of isolating Turkey), have created new incentives for cooperation and a further improvement in bilateral relations.

However, the current Turkish-Greek detente remains fragile. It is likely to be tested before long by the Cyprus issue – specifically, by the disagreement over Cyprus' EU membership. Turkish and Turkish Cypriot leaders have opposed any unilateral Greek Cypriot bid for EU membership, and have insisted on a prior settlement of the ethnic dispute in Cyprus. However, the EU states have acceded to Greek pressure, and have commenced membership negotiations with the Greek Cypriot government. These negotiations are expected to conclude by 2002. Should the EU states allow Greek Cyprus accession to the EU without a prior settlement of the Cyprus issue, vital Turkish and Turkish Cypriot interests will be jeopardized. This will inevitably hurt Turkey's relations with Greece.

It is remotely possible that some compromise will be found, with active help from Ankara and Athens, to reconcile the Turkish Cypriot demand for a confederation with the Greek Cypriot designs for a centralized federation, before EU membership of Cyprus will be realized. That kind of outcome will spur Turkey and Greece to achieve progress in the Aegean as well. In particular, confidence regarding Turkey's eventual EU membership is bound to stimulate Turkish leaders to proceed to a new era of relations with its Aegean neighbour. Thus, EU membership for Turkey may well serve as a "transformative situation" of the kind that lead states to consider major policy changes. Turkish and Greek leaders will have their statesmanship tested in the coming years.

FROM COMPETITION TO PARTNERSHIP? A PATH TOWARDS 'AEGEAN' RECONCILIATION. A GREEK VIEW

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INTRODUCTION

The points of friction between Greece and Turkey are multiple, and much ink has been spilled in description, analysis, and interpretation of these problems as well as in the presentation of a variety of Greek-oriented, Turkish-oriented and third-party perspectives (WILSON, 1979-80; COULOUMBIS, 1983; VEREMIS, 1988; KARAOSMANOGLOU, 1988; BAHCHELI, 1990; STEARNS, 1992; GUNDUZ, 2000; AYDIN, 1999; STRATI, 2000). Regardless of the merits and demerits of the case of each of the disputants, the central question that needs to be asked is whether Greece and Turkey, which have been involved in an undisguised Cold War since the mid- to late 1950s, will be better off in a condition of protracted conflict, as compared to entering into a new phase of mutual and active engagement and even cooperation. Unequivocally, the answer is that both countries would be much better off if they were to reach a final reconciliation, a new historic compromise.

The 1996 crises in the Aegean and in Cyprus, however, underscore the ease with which a state of protracted tension between the two countries may degenerate into organised violence and warfare. Hopefully, and following the 'teutonic' convulsions of August and September 1999, the leaderships in Greece and Turkey seem to be realizing that the prospect of a Greek-Turkish conflict does not serve any side's interests. A war is unthinkable because, to begin with, it will isolate both belligerants from their Western institutional affiliations. Further, even if Greece or Turkey were to secure some marginal territorial gains after some initial battles, a chain of revanchist conflicts will surely follow, classifying both countries as high risk zones with a devastating impact on their economies and societies (COULOUMBIS, 1999).

In the context of the effects that late 1980s/early 1990s systemic transformation had on Turkey and Greece, a central question is the extent to which change in the bilateral relationship has been cyclical or cumulative. The general course of events is well known as well are the policy problems. What this brief paper aims at assessing, are the implications of the new structural changes that have occurred, and the extent to which assumptions of continuity and change are valid. The central theme, within this framework, relates to the nature of change: What are the prospects for a real and lasting reconciliation in the post-earthquake and post-Helsinki rapprochement? Can we identify a set of ideas that can form a mutually accepted path for a durable 'Aegean' settlement?

REFLECTING ON A SEA OF TROUBLE I: THE SYSTEMIC (US AND EU) IMPERATIVES

For more than twenty five years Greeks have perceived external threat as emanating from a single 'source' - Turkey. Military and diplomatic deterrence was indispensable to the concept of Greek survival. To Greek policy-makers the stakes seemed extremely high; successful deterrence generated at best an uneasy peace, whereas failure would mean the transformation of Greek islands and Cyprus into battlefields. Ironically, although the end of the Cold War resulted in the overnight transformation of the military situation in Europe, no other country experienced the change less intensely than Greece. The 'new world order' did not change the basic parameters as these have been consistently articulated by both Greek elites and public opinion. The Greek point of view consistently treats Greece as 'status quo' country, and Turkey as an adversary who has never stopped pursuing revisionist policies in Cyprus and the Aegean, as well as aiming at altering the balance of power and interests in the region.

Objectively, there can be little strategic rationale for premeditated conflict between Greece and Turkey. Open conflict would pose enormous political risks for both of them, quite apart from uncertainties at the operational level. Yet the risk of an accidental clash remains, given the continuing armed air and naval operations in close proximity and the highly charged atmosphere surrounding competing claims (LESSER, 2000, 32). The Aegean and especially Cyprus are the sensitive national questions *par excellence.* Moreover, with both countries modernizing their military capabilities, the potential for destructiveness and escalation is far greater today than in the past.

A Greek-Turkish clash would have profound implications for Turkey and the West. It would also have operational consequences for the US. In strategic terms, a conflict under current conditions might result in an open-ended estrangement of Turkey from the West, since the Cold War imperatives that argued for restraint in sanctions against Turkey in 1974 are absent today. More broadly, a Greek-Turkish conflict might encourage 'civilizational' cleavages in the West. 'Even Israel might be sensitive to the political consequences of too overt a military relationship in the context of a conflict over Cyprus, especially if Israeli weapons were used, and might look for ways to scale back its cooperation'(LESSER, 2000, 34-35). The risk of a clash and the likely strategic and operational consequences make risk reduction an imperative for the US (and NATO). The same is true for the EU.

The relative stagnation in EU-Turkish relations, despite the decisions taken at the 1999 Helsinki Summit, has also contributed to the sense of disappointment and uncertainty, and has made Turkish behavior towards Greece more unpredictable and perhaps harder for the US to control. If Turkey cannot strengthen its relationship with the EU - in the context of future membership – it cannot successfully pursue its legitimate foreign policy goals. For the EU it would be a disaster to 'lose' Turkey, but how to properly bind it to Europe seems not very clear even after Helsinki.

The policy implications for Greece are that the longer the relationship between Turkey and the EU remains overshadowed by uncertainties, the more the US remains 'the only and undisputed' arbiter in an essentially balance of power game. The (potential) deterioration of Turkey's ties with the EU will further increase the importance of strong ties to the US. The US is, generally, seen by Turkey as being more supportive of Turkey's security concerns than Europe. Washington has strongly backed Turkey's candidacy for EU membership and has lent strong political support to Ankara's security efforts.

At this point, needs to be emphasised that the nature of the European integration process has all the systemic properties needed to fundamentally alter the exclusive geopolitical, 'zero-sum-game' quality of the Greek-Turkish conflictual relationship. However, the challenge for Turkey is enormous. So far, Turkish elites have not had to confront the dilemma posed by a strong nationalist tradition and a powerful attachment to state sovereignty, on the one hand, with the rpospect of integration in a sovereignty-diluting EU, on the other. Even short of full membership, candidacy implies a great institutionalised scrutiny, convergence and compromise. From the least political issues (e.g. food regulations) to high politics, a closer relationship with formal EU structures will pose tremendous pressures on traditional Turkish concepts of sovereignty at meny levels. It is a process that has been difficult for all member states of the EU. Surrendering sovereignty has been one of the most fundamental elements of the European integration success. For an EU member state, pursuing nationalist options outside the integration context has become almost impossible.

If there is a 'Helsinki spirit', that more than anything else reveals the need – for both countries - for a more 'strategic' approach towards each other. Both countries have a longer-term strategic interest in seeing Turkey's EU vocation succeed. Such a success has the potential of changing Greece's perception of threat, and fostering political and economic reform in a Turkey reassured about its place in Europe. The US and Europe will benefit from a more effective and predictable strategic partnership with Turkey. A key task for US foreign policy elites will be to make sure that Greek-Turkish brinkmanship no longer threatens broader interests in regional détente and integration. The stakes of bringing to fruition this strategy of reciprocal accommodation are extremely high. Lasting rapprochement would yield enormous benefits for everybody involved (KUPCHAN, 2000, 9).

However, such a rapprochement remains nascent and fragile for three main reasons. First, most of the changes have come on the Greek side. There has been no major shift in Turkish policy. Without a Turkish gesture to match Greece's lifting of its veto to Turkey's EU candidacy it may prove difficult for Athens to maintain domestic support over the long run. Indeed, the Greek government operates with the benefit of the doubt even within its own party confines.

Second, so far the rapprochement has been limited to less-controversial areas. Following Helsinki, the two countries signed nine agreements in areas of so-called low politics: tourism, environmental protection, economic cooperation, investment, research and technology, maritime transportation, culture, cooperation

of customs authorities, and cooperation to combat terrorism, drugs trafficking, and illegal immigration. But in October 2000 the rapprochement suffered yet another setback when dogfights broke out in the Aegean, and disagreements during NATO's Destined Glory exercise led Greece to withdraw its forces. This illustrates that gradual rapprodhement between the two sides is going to be very difficult and will encounter many ups and downs (MARIAS, 2001). Accordingly, the peoples of both countries wonder whether a real rapprochement can take place and under what ters it can be maximised.

And all these when the really sensitive issues have yet to be addressed. The current climate will prove its durability only when these issues are included in the reconciliation agenda. Finally, there is the issue of Cyprus. While Cyprus is technically not a bilateral dispute, it is an integral element of the broader fabric of the relationship and cannot be ignored. Although there is a politically costly effort to downplay the linkage by Athens, without progress on Cyprus the current rapprochement will be impossible to sustain over time (LARRABEE, 2000, 15).[1]

At the same time, to the extent that Turkish incorporation into the EU remains an open question for years to come, the triangular Greek-US-Turkish entanglement becomes even more complex. The issue here, is the extent to which US strategy as far as the management of the Greek-Turkish conflict is concerned will remain the same. Without going into details that are beyond the scope of this paper, we can safely argue that there are strong elements of continuity in US foreign policy in general. In the context of Greek-US relations, the analysis was in the past shaped predominantly by the Greek-Turkish debate. This was appropriate given the pre-eminent perception of the Turkish threat in Greece since 1974, but the rhetoric of this debate continues to shape both Greek and American thinking and strategy. As a result, the issue of US leadership - whether the US can continue to fulfill a balancing role or whether there should be a different American approach and subsequently a different Greek response - is given continuing prominence.

REFLECTING ON A SEA OF TROUBLE II: THE GEOPOLITICAL IMPERATIVES

The noted geopolitician and former US ambassador to Turkey, Robert Strausz-Hupe, said in 1982 during a discussion about the Cyprus problem that 'governments may come and governments may go, but geography never changes.' There was one immediate lesson in Ambassador's Strausz-Hupe's comments contrasting the tenuous state of governments with the constancy of geography: Change your thinking and look at the geographic imperatives, not just the political ones. Using this premise helps to keep analysis of eastern Mediterranean issues focused on realities (ROSS NORTON, 1998).

[1] F.S. Larrabee, 'Greek-Turkish Rapprochement: Is it Durable?', in *The Strategic Regional Report*, Vol. 5(4), May/June 2000, p. 15.

Greece and Turkey share common land and sea borders and they both have extensive coastlines along the Aegean Sea. The geographic imperatives of both countries can moderate actions as well as provoke them. These imperatives are long-term and can transcend governments and ruling elites. They are also interconnected, so that if one imperative is altered it will probably affect others. When considering geographic and political imperatives in Greek-Turkish relations, there are five practical lessons that have remained constant over time (ROSS NORTON, 1998).

First, progress in Greek-Turkish relations should be possible even when Athens and Ankara have politically weak governments. It is true that strong governments in both governments are required to make major improvements in their relationship. Nevertheless, some limited but important steps can be taken even when this is not the case. Regardless of the relative strength of each government, the militaries of Greece and Turkey will continue to conduct exercises in the Aegean, pursue their national objectives, and protect their interests. This factor leads to a regular cycle of increased tensions and serious incidents, some of which involve loss of life and military equipment. Even weak governments want to keep such occurrences to a minimum.

Second, it is better to move slowly on Aegean disputes. Perceptions need to be changed gradually, trust must be built, and bureaucracies and populations must be prepared for change. Also, if a country 'loses' on an Aegean issue, it is almost impossible to regain the status quo. There are not issues for interested parties to experiment with, and it is counterproductive to pressure either country into taking too many risks without having a good expectation of the outcome.

Third, do not underestimate the importance of geography. The 1996 Imia crisis brought both countries to the brink of war. Turkey's current 'grey areas or zones' policy, which raises sovereignty questions concerning selected Aegean islands and islets, can also lead to a serious confrontation if it is not pursued in a cooperative and mutually agreed manner with the Greek government. In this regard, the Greek view of referring legitimate disagreements about sovereignty to the International Court of Justice is a rather logical and reasonable approach.

Fourth, specific Greek-Turkish disputes should never be viewed in isolation. There is a delicate interconnection among them, even if they do not seem related. For example, Greece's claim to a national airspace of ten nautical miles may appear to have nothing in common with Turkey's pursuit of a 'fair' share of the Aegean seabed. Yet, no Greek government would consider changing its policy until there is a mutually agreed settlement on the delineation of the seabed. To do otherwise would be viewed as a sign of weakness and could thus adversely affect its negotiating position on the issue, or on any other bilateral issue.

Fifth, Greece and Turkey do not view their differences in the same way. What is important to one may not be to the other. For example, for Greece, Cyprus is a priority that adversely affects a broad range of bilateral issues. For Turkey, Cyprus is a problem that is secondary to its access to the Aegean continental shelf. This means that at least two issues, one that is important to Athens and one that is

important to Ankara, will have to be discussed simultaneously, or there will have to be agreement on the order in which they are discussed.

THE WAY FORWARD: IDEAS FOR A HISTORIC COMPROMISE

A much needed historic compromise between Greece and Turkey must rest on two general and two operational principles of foreign policy behaviour (COULOUMBIS and KLAREVAS, 1997; COULOUMBIS and LYBEROPOULOS, 1998). The first general principle involves both countries' mutual renunciation of the use of force, possibly with the signing of a non-aggression pact. The second general principle, which follows from the first, is that the Greek-Turkish disputes in the Aegean will follow the road of peaceful settlement, involving time-tested methods such as bilateral negotiations and, in the case of deadlocks, conciliation, good offices, mediation, arbitration, and adjudication.

The two operational principles apply to Turkey and Greece, respectively. For the benefit of Turkey, it must be made clear that the Aegean will not be transformed into a 'Greek Lake'. For the benefit of Greece, it also must be made clear that the aegean cannot be partitioned or subdivided in a way that encloses Greek territories such as the Dodecanese and eastern Aegean islands in a zone or zones of Turkish functional jurisdiction.

For the sake of clarity and precision, one of the many alternative strategies leading towards (or permitting) a comprehensive settlement of the Greek-Turkish disputes, needs to be outlined. This strategy assumes a just and mutually acceptable settlement of the Cyprus question (COULOUMBIS and KLAREVAS, 1997). Furthermore, the strategy rests upon the two general and the two operational principles presented above.

Thus, the thorny issue of the Aegean continental shelf will once more become subject to bilateral negotiations, which should satisfy Turkey. Questions that defy mutual agreement will be submitted to arbitration or to the International Court of Justice for final resolution (which should satisfy Greece). Alternatively, both Greece and Turkey could agree (following the logic of the Antarctic Treaty) to defer the issue of continental shelf for a number of years, reserving the right to press their respective claims at the end of the moratorium period provided by any such treaty. Needless to say, the 'Antarctic approach' would gain additional appeal if we were to assueme that there are no significant and profit-generating oils reserves in the Aegean region. Furthermore, the opportunity costs involving highly probable Aegean environmental dangers (caused by oil splls, for example) should be taken into consideration, given the fact that both Greece and Turkey are heavily dependent on the tourist industry to help their balance of payments.

One way of bypassing the thorny issues of Turkish challenges to Greece's ten-mile territorial air limit (in effect since 1931) and the potential of Greece's extending its territorial waters from the present six miles to the generally accepted twelve-mile limit could rely on the following scenario: Both Greece and Turkey agree to twelve-mile limits (for both territorial waters and airspace) for their

mainland territory, and to six-mile limits for Aegean islands belonging to Greece and Turkey (with the exception of Euboea and Crete, which would enjoy the twelve-mile limit because of their size and distance from Turkey).

Questions such as Flight Information Region (FIR) and NATO command-and-control arrangements in the Aegean should be handled as technical issues to be settled within the framework of the International Civil Aviation Organisation (ICAO) and NATO, respectively, and in accordance with practices that have been employed since the early 1950s. It should be stressed that technical issues should be much more readily resolved following substantive progress in the settlement of the Cyprus and continental shelf questions.

In an era favouring arms control, arms reductions, and confidence-building measures, Greece and Turkey would benefit from undertaking a series of mutual and balanced force reductions (MBFRs) involving their land and sea border areas in Thrace and the Aegean. A mirror-image reduction of *offensive* weapons (especially landing craft) in the border areas would go a long way towards reducing the chances of the outbreak of armed conflict as well as relieving the hard-pressed economies of both countries from heavy burden of high military expenditures. Ultimately, all parties, including the two Cypriot communities, should pursue reductions in arms that are primarily offensive in purpose. Eventually, following a grand settlement and the establishment of peaceful and friendly relations between Greece and Turkey in the Aegean and a mutually acceptale settlement in Cyprus, the border areas between the two countries will no longer call for fortifications of any consequence.

Finally, Greece, Turkey as well as other states in the region, should embark on the much needed task of mutual and balanced prejudice reduction (MBPR), whether prejudice is manifested in hostile press commentaries, textbooks, literature, theatre, movies, sports, or other forms of social and cultural expression. Universities, think tanks, business and labour associations, and non-governmental organisations can contribute to such a task immensely through carefully conceived projects that promote mutual engagement and co-operation.

Following a potential grand settlement, trade, tourism, investment, and joint ventures between Greece and Turkey at home and abroad should increase significantly. In the final analysis, the state of relations between the two countries, which impacts upon the prospects for peace in Cyprus, is a product of the attitudes and perceptions of ruling elites and general publics, operating within global and regional settings.

Since 1974, Greece has developed durable and tested democratic institutions and has become a member of the EU. Turkey is currently at the cross-roads of the great choice between a European and a non-European orientation. The ingredients of a lasting settlement, given the current international setting can be based only on the asuumption that Turkey, in addition to Greece, will solidify its European integration orientation.

REFERENCES

AYDIN, M., 1999. Cacophony in the Aegean; Contemporary Turkish-Greek Relations. *The Turkish Yearbook of International Relations*, XXVII 1997.

BAHCHELI, T., 1990. *Greek-Turkish Relations Since 1955*. Boulder, Westview Press.

COULOUMBIS, T.A., 1983. *The United States, Greece, and Turkey: The Trouble Triangle*. New York, Praeger.

COULOUMBIS, T.A., 1999. Turkish Challenge and European Opportunity: Greek Foreign Policy Priorities in a Post-Cold War Setting. In BLANK, S.J. (ed) *Mediterranean Security into the Coming Millennium.* Strategic studies Institute.

COULOUMBIS, T.A., CARLEY, P., 1997. *Greek-Turkish Relations and US Foreign Policy. Cyprus, the Aegean, and Regional Stability*. United States Institute of Peace, Peaceworks No. 17.

COULOUMBIS, T.A., KLAREVAS, L.J., 1997. Prospects for Greek-Turkish Reconcilliation in a Changing International Setting. In BAHCHELI, T.,

COULOUMBIS, T.A., LYBEROPOULOS, T., 1998. The Troubles Triangle: Cyprus, Greece, Turkey. The Hellenic Foundation for European and Foreign Policy (ELIAMEP), Occassional Paper 98.06.

GUNDUZ, A., 2000. A Tentative Proposal for Dealing with the Aegean Disputes. In ÖZTÜRK, B., 2000. *The Aegean Sea 2000. Proceedings of the International Symposium on the Aegean Sea.* 5-7 May, Bodrum, Turkey.

KARAOSMANOGLOU, A.L., 1988. Turkey's Security Policy: Continuity and Change. In STUART, D.T. (ed) *Politics and Security in the Southern Region of the Atlantic Alliance*. Baltimore, MD, Johns Hopkins University.

KUPCHAN, C.A., 2000. Greek-Turkish Rapprochement: Strategic Interests and High Stakes. *The Strategic Regional Report*, 5(2), February.

LARRABEE, F.S., 2000. Greek-Turkish Rapprochement: Is it Durable? *The Strategic Regional Report*, 5(4), May/June.

LESSER, I.O., 2000. *NATO Looks South: New Challenges and New Strategies in the Mediterranean*. Santa Monica, CA, RAND.

MARIAS, E., 2001. Toward a Political Community in the Aegean Area: New Opportunities for Greece and Turkey. *The Fletcher Forum of World Affairs,* 25(1), Winter.

ROSS NORTON, S., 1998. Geography Never Changes. *The Strategic Regional Report*, 3(4), June/July.

STEARNS, M., 1992. *Entangled Allies: US Policy Toward Greece, Turkey and Cyprus*. New York, Council on Foreign Relations.

STRATI, A., 2000. Greece and the Law of the Sea: A Greek Perspective. In CHIRCOP, A., GEROLYMATOS, A., and IATRIDES, J.O. (eds) *The Aegean sea After the Cold War. Security and Law of the Sea Issues.* New York, St. Martin's Press.

VEREMIS, T., 1988. Greece. In STUART, D.T. (ed) *Politics and Security in the Southern Region of the Atlantic Alliance*. Baltimore, MD, Johns Hopkins University.

APPLYING THE LAW OF THE SEA IN THE AEGEAN SEA

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INTRODUCTION: RIGHTS AND INTERESTS[1]

At the heart of the international law problems in the Aegean Sea are perceptions that are rooted in interests that may be amenable to objective evaluation, and in understandings of political, historical and cultural circumstances that are undoubtedly more subjective. Law is not the source of these problems. It is a setting in which they are addressed. At its best, law can provide a basis for resolving the problems in a manner that fairly accommodates the underlying interests.

At its worst, however, legal argument can divert attention from the real underlying concerns. Courts may be limited to solutions prescribed by the law, taking into account only legally relevant facts. Governments are not so limited. They are free to agree on any of an almost limitless range of solutions for any reasons they deem important, whether or not a tribunal might have imposed the same solution. If litigation can be said to be about perceptions of rights, negotiation can be said to be about perceptions of interests.

This is not to suggest that law is irrelevant to negotiation. It has many functions to play in that context. Mutual understanding of the legal foundations of the respective positions can help build an atmosphere conducive to successful negotiation. Perceptions of the strengths and weaknesses of legal arguments may well influence negotiating positions. Among the least discussed of these functions, however, is law's critical role in simplifying negotiations by determining what is not on the table (at least in more than a purely formal sense).

For law to play a facilitating role, negotiators must have similar perceptions of what the law is. To begin with, they must agree on the sources of their mutual obligations. If the Aegean is the question, then apart from treaties binding the parties, one must decide where to look for the general rules of the law of the sea that establish the basic rights and duties of the parties.

Turkey is not as yet party to the United Nations Convention on the Law of the Sea. Nonparties (and, indeed, even parties with respect to nonparties) are certainly free to argue that their rights and obligations under customary law are different from those set forth in the Convention. But to what end? The question is

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whether, and if so to what extent, it makes sense to take the position that the Convention is not an appropriate point of reference for purposes of negotiation. Three points may be particularly pertinent in this regard:

1. Some two-thirds of the nations of the world, including most states with significant interests in the Aegean, are now party to the Law of the Sea Convention. It is widely regarded as the single most authoritative source for the rules of the international law of the sea binding all states, and is so treated by international tribunals and institutions and by the largest maritime state that has yet to become party, namely the United States. Any position rooted in the argument that the Convention is not generally declaratory of customary international law is unlikely to be regarded as particularly persuasive by the many governments and experts that do regard the Convention as generally declaratory of customary international law. It also has the effect of challenging a whole range of interests states may have in the status of the Convention under customary law that may have nothing to do with the specific problems under discussion.

2. The argument that the Convention may be generally declaratory of customary international law, but that a specific provision in the Convention is not, would require extensive work to demonstrate convincingly that existing custom and practice as well as *opinio juris* are different. Even if, in some abstract sense, such an argument were "correct," precisely how much good is it likely to do in a negotiating context?

3. Perhaps most important, to the extent one is seeking a common point of reference to facilitate discussion, there is no practical alternative to the Convention with respect to the basic rules of the law of the sea.

One should bear in mind that, in the specific context of the Aegean problem, it is by no means clear that the Convention is, overall, more favorable to one side than the other. [2]

- If, in principle, the Convention permits a territorial sea of up to 12 nautical miles, it also permits the exercise by all ships and aircraft, including submerged submarines and military aircraft, of the right of transit passage through the territorial sea in straits used for international navigation between two parts of the high seas (or exclusive economic zone). Properly understood, the right of transit passage would extend to a large part of the total area that might be embraced by a 12-mile territorial sea in the Aegean.

[2] It is, accordingly, possible to conclude that Turkey has nothing to lose by becoming party to the Law of the Sea Convention, and perhaps much to gain. For example, Turkey's continuing failure to become party might be understood as reflecting a view that the Convention prejudices Turkey's position regarding the Aegean. Because the Convention is the most likely frame of reference for analysis by others, remaining outside the Convention might be perceived by others as a tacit admission that the Turkish case is weak. That, doubtless, is not the intent. But effect, not intent, is the issue.

- If the Convention accords certain environmental rights to the coastal state, it carefully balances those rights with environmental duties to other states, especially nearby states, and with protections for underlying freedoms and rights of all states with respect navigation, overflight, and telecommunications. It establishes strong international mechanisms to ensure that these freedoms and rights are respected.
- If there is an express reference to equidistance in the Convention's rules regarding the delimitation of the territorial sea between neighboring states, there is also an express reference to historic or other special circumstances justifying a different boundary. With respect to areas beyond the territorial sea, the Convention's provisions on delimitation of the continental shelf and the exclusive economic zone presumably incorporate, and in any event do not alter, the developing international law on the subject as evidenced by the rich jurisprudence of the International Court of Justice and arbitral tribunals.

The problem in the Aegean is not the Law of the Sea Convention. The problem is its application. Maximum application by either coastal state of its presumed rights in the Aegean Sea under the Convention might create a situation that is intolerable to the other (and perhaps third States). Those who would expect Turkey to live comfortably with a unilaterally declared 12-mile territorial sea throughout the Aegean are no more likely to be correct than those who would expect Greece to live comfortably with the unilateral determination by foreign military aircraft of their own routes through much of the airspace above its territorial sea throughout the Aegean.

Careful analysis of the Law of the Sea Convention may well point to possible solutions to this problem that rationally advance the security, economic and environmental interests of both coastal States as well as the international community as a whole. Such analysis could most productively be based on at least two propositions:

- The search for solutions should focus on the interests of the parties and avoid emphasis on their legal positions;
- The Law of the Sea Convention supplies an appropriate frame of reference for identifying such solutions, whether or not it is binding on the parties as such.

The Effect of Extending the Territorial Sea

Pursuant to the United Nations Convention on the Law of the Sea, "The sovereignty of a coastal State extends … to an adjacent belt of sea, described as the territorial sea. … This sovereignty extends to the air space over the territorial sea as well as to its bed and subsoil."[3] "Every State has the right to establish the breadth of its territorial sea up to a limit not exceeding twelve nautical miles, measured from

[3] United Nations Convention on the Law of the Sea, art. 2, paras. 1 & 2 (hereinafter cited as Law of the Sea Convention).

baselines determined in accordance with this Convention."[4] No distinction is made between islands and other land territory in this regard.[5]

In complex geographic areas such as a semi-enclosed sea containing many islands in close proximity to each other, the effect of extending the breadth of the territorial sea may be to extend the sovereignty of the coastal state over substantial parts of that sea not previously subject to such sovereignty.[6]

Most of the relevant islands in the Aegean Sea are part of Greece. They extend from the Greek mainland across the Aegean Sea until they reach the coast of Anatolia and islands immediately adjacent thereto that are part of Turkey. In the case of the Cyclades and Dodecanese islands, there is an almost unbroken stretch of Greek islands traversing almost all of the southern Aegean Sea. With a twelve-mile territorial sea, there would be no routes through the high seas (or exclusive economic zone) between the southern Aegean Sea, on the one hand, and much of the western coast of Anatolia, including the Turkish Straits,[7] on the other hand.

The question of extending the breadth of the territorial sea in a complex geographic area such as the Aegean Sea may be viewed from two aspects: a strategic aspect and a natural resources aspect.

Strategic Aspect

The strategic aspect implicates three basic interests. The first two relate to interests of states other than the coastal state whose territorial sea is the object of the inquiry. The third relates to the interests of that coastal state.

- The first is the strategic interest in mobility: the right to communicate through the Aegean Sea for defense and economic purposes, principally by sea or air. In this regard, it may be noted that the defense interest of a state engages not only the mobility of its own warships and military aircraft but the mobility of friendly forces as well. It also may be noted that, at some point, the capacity of a state to communicate with other states for trade and other economic purposes itself becomes a strategic issue.
- A distinct, albeit related, strategic interest concerns the availability of training and operational areas for naval and air forces; this interest is likely to be of principal concern to states in the immediate vicinity.

[4] Law of the Sea Convention, art. 3.

[5] Law of the Sea Convention, art. 121.

[6] The question of the right of a state to establish the breadth of its territorial sea or other maritime zones within the maximum limits prescribed by the Convention should be distinguished from the question of the delimitation of the territorial sea and other maritime zones between coastal states in areas adjacent to the coast of more than one state.

[7] The term "Turkish Straits" is used to refer collectively to the route between the Aegean Sea and the Black Sea through the Dardanelles or Çanakkale Boğazi, the Sea of Marmara, and the Bosporus or Istanbul Boğazi.

- The third is the strategic interest of the coastal state in protecting the security of its land territory, including its islands.

The strategic interest in mobility is shared by a significant number of states, including maritime states and those whose trade and communications pass through the relevant area. In the case of the Aegean Sea, this includes navigation and communications between states bordering the Mediterranean Sea (as well as the seas and oceans beyond the Suez Canal and the Strait of Gibraltar), on the one hand, and states bordering the Black Sea and the Aegean Sea, on the other hand. In particular, it must be recognized that international shipping cannot navigate to or from the Turkish Straits or to or from many Turkish ports on the Aegean Sea without traversing marine areas in relatively close proximity to Greek islands. The same would be true of an aircraft that has not been granted permission to overfly the islands or other relevant land territory.[8]

In the context of analyzing the strategic issue in the Aegean Sea, it is useful to consider the effect that different breadths of the territorial sea would have there, including the classic three-mile limit, the six-mile limit currently claimed in the area, a 10-mile limit claimed by Greece in 1931 for aviation purposes[9] in the context of the 1919 Paris Convention for the Regulation of Aerial Navigation[10] (which has since be superceded by the 1944 ICAO Convention[11]), and the twelve-mile maximum limit permitted by the Law of the Sea Convention. Even a cursory examination of the maps will reveal that with a classic three-mile territorial sea, there are a substantial number of high seas (or exclusive economic zone) routes running through the Aegean. A six-mile territorial sea substantially eliminates many of these routes. With a twelve-mile territorial sea, these routes – as well as certain significant operating areas beyond the territorial sea – disappear.

Natural Resources Aspect

The natural resources aspect of the question of the breadth of the territorial sea implicates the right to regulate the exploration and exploitation of fisheries and other living resources as well as hydrocarbons and other nonliving resources. Under the régimes of the continental shelf and the exclusive economic zone (EEZ) set forth in

[8] "No state aircraft of a contracting State shall fly over the territory of another State or land thereon without authorization by special agreement or otherwise, and in accordance with the terms thereof." Convention on International Civil Aviation (ICAO Convention), Dec. 7, 1944, art. 3(c), 15 U.N.T.S. 295 (the definition of state aircraft includes military aircraft). Consent is also required for scheduled international air service over the territory of a state. *Id.*, art. 6.

[9] Decree of 6/18 September 1931, United Nations, Legislative Series, ST/LEG/SER.B/6, p.18.

[10] 11 L.N.T.S. 173.

[11] ICAO Convention, note 8 *supra*, art. 80.

the Law of the Sea Convention, these activities are subject to coastal state sovereign rights to very substantial distances beyond the territorial sea.[12] Thus, the breadth of the territorial sea is largely irrelevant to the natural resources aspect of the question in principle. The natural resources issue is essentially a maritime boundary delimitation issue between the neighboring coastal states of the relevant area, bearing in mind their duty to cooperate with respect to matters such as conservation and environmental protection.

In principle, the exploration and exploitation of all natural resources of the Aegean Sea may be brought under the regulatory control of the coastal states without regard to the breadth of the territorial sea. The question is one of maritime boundary delimitation between Greece and Turkey or other arrangements between them for the regulation of the resources.

Although the natural resource aspect of the question of the breadth of the territorial sea is primarily a bilateral delimitation issue, the converse is not true. So long as the strategic aspect of the question is not otherwise resolved, it is evident that the question of delimitation of maritime boundaries between the coastal states affects not only the natural resources aspect of the question but, at least insofar as Greece and Turkey are concerned, the strategic aspect as well. On the other hand, if the strategic aspect of the question were otherwise resolved to the satisfaction of all states concerned, the question of delimitation of maritime boundaries would become mainly, albeit not exclusively, a question affecting the natural resources aspects of the question.

It is therefore apparent that, until its strategic aspect is resolved, the question of the breadth of the territorial sea in the Aegean Sea implicates significant strategic interests of a significant number of states, including Greece and Turkey. Once the strategic aspect is resolved, the remaining delimitation question largely concerns the natural resource interests of only Greece[13] and Turkey. In light of this relationship between the issues, this paper will concentrate on the strategic aspect of the problem.

Passage Régimes

The 1958 Convention on the Territorial Sea and the Contiguous Zone recognized the traditional right of innocent passage through the territorial sea, and extended that right to internal waters enclosed by straight baselines.[14] It prohibited suspension of innocent passage in straits which are used for international navigation between one part of the high seas and another part of the high seas or the territorial sea of a

[12] Law of the Sea Convention, arts. 56, 57, 76, 77.

[13] As a member of the European Community, Greece has transferred competence over certain matters, including fisheries matters, to the Community.

[14] Convention on the Territorial Sea and the Contiguous Zone, Apr. 29, 1958, arts. 5, 14.

foreign State.[15] The 1958 Convention did not however establish a maximum permissible breadth of the territorial sea,[16] and did not provide for the enclosure of archipelagic waters. Many maritime states continued to adhere to the position that the traditional 3-mile limit (or some other limit short of twelve miles) was the maximum permissible breadth of the territorial sea, and refused to recognize broader territorial sea claims as well as sovereignty claims over archipelagic waters.

The 1982 UN Convention on the Law of the Sea resolves the question of the geographic and substantive restraints on coastal state claims of sovereignty by:

- establishing twelve miles as the maximum permissible breadth of the territorial sea (and preserving high seas freedoms of navigation and overflight in all areas seaward of the territorial sea, including the EEZ);[17]
- recognizing a new régime of archipelagic waters applicable only to archipelagic states comprised wholly of islands;[18]
- clarifying and preserving the right of innocent passage in the territorial sea and internal waters enclosed by straight baselines, and extending it to archipelagic waters;[19] and
- accommodating the interests of all states in the freedoms of navigation and overflight affected by these extensions of coastal state sovereignty by preserving those freedoms for the purposes of transit where areas subject to the sovereignty of the coastal state (straight baseline internal waters, archipelagic waters, and the territorial sea) separate areas that are not subject to coastal state sovereignty (EEZ and high seas); this is achieved through the substantially identical régimes of transit passage of straits (in the case of the territorial sea and straight baseline internal waters)[20] and archipelagic sea lanes passage (in the case of archipelagic waters).[21]

It is evident from the last of these that the right of innocent passage was not regarded as an adequate guaranty of communications rights and freedoms through waters separating two parts of the high seas (or EEZ). Among the features of innocent passage that rendered it inadequate were that it does not apply to overflight,

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[15] *Id*., art. 16(4).

[16] The fact that the contiguous zone, which lies beyond the territorial sea, could not extend beyond twelve miles from the baseline from the territorial sea is measured, *id.* art. 24, nevertheless implied that the maximum limit of the territorial sea was within that limit.

[17] Law of the Sea Convention, arts. 3, 58(1), 87.

[18] Law of the Sea Convention, arts. 46(a), 49.

[19] Law of the Sea Convention, arts. 8(2), 17-32, 52.

[20] Law of the Sea Convention, arts. 35(a)&(b), 37, 38. The legal régime in straits in which passage is regulated by long-standing international conventions specifically relating to such straits is unaffected. The Montreux Convention regulating the Turkish Straits is regarded as coming within this exception. *Id*., art. 35(c).

[21] Law of the Sea Convention, arts. 53-54.

that it requires submarines to navigate on the surface, that the coastal state may take action to prevent passage that is not innocent, that the meaning of innocence has been disputed, that innocent passage is subject to unilateral regulatory powers of the coastal state, and that the coastal state may suspend innocent passage outside straits used for international navigation. Indeed, the exceptions – applying only innocent passage in the territorial sea (or straight baseline internal waters) if there is a high seas (or EEZ) route of similar convenience running through the strait,[22] and applying non-suspendable innocent passage rather than transit passage in a strait formed by an island and the mainland where a route of similar convenience through the high seas (or EEZ) exists seaward of the island[23] – prove the rule: the high seas route of similar convenience substantially avoids the problem giving rise to the need for a right of transit passage through the strait. Similarly, in the case of archipelagic sea lanes passage, duplication of routes of similar convenience between the same entry and exit points is unnecessary.[24]

The question of what constitutes a strait used for international navigation between two parts of the high seas (or EEZ) is not merely, or even primarily, a geographic question. It is a legal question: Where is there a right of transit passage? It is evident from the function of the right of transit passage that it applies where territorial seas (or straight baseline internal waters) completely or substantially separate two areas of the high seas (or EEZ).

With a classic three-mile territorial sea, viewed either from a geographic or a legal perspective, there would be a number of distinct straits used for international navigation in the Aegean Sea where the islands are closer than six miles to each other or to the continental coast. However, with a territorial sea of six or twelve miles in the Aegean Sea, the individual geographic straits merge into a large continuous expanse of territorial sea that itself completely or substantially separates two areas of the high seas (or EEZ). That continuous expanse of territorial sea becomes the area through which there is a right of transit passage and, in that legal sense, the strait used for international navigation. The effect is essentially the same as that which obtains in internal waters enclosed by straight baselines drawn around an island fringe immediately off the coast through which there is a right of transit passage,[25] and that which obtains in archipelagic waters through which there is a (substantially identical) right of archipelagic sea lanes passage.

It is therefore apparent that, with a six-mile or twelve-mile territorial sea, much of the territorial sea of Greece and Turkey in the Aegean Sea may be regarded as comprising part of a few continuous straits used for international navigation through which all states, including Greece and Turkey, enjoy the right of transit passage. This includes, but is not limited to, traffic bound to and from the Turkish Straits.

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[22] Law of the Sea Convention, art. 36.
[23] Law of the Sea Convention, art. 38(1).
[24] Law of the Sea Convention, art. 53(4).
[25] Law of the Sea Convention, art. 35(a).

ROUTES

If, as a result of establishing a continuous territorial sea around a group of proximate islands – or as a result of drawing straight baselines or archipelagic baselines – there is a marine area surrounding many islands through which foreign states enjoy freedom of navigation and overflight for the purpose of transit, in principle they may use any route they wish,[26] provided they comply with the requirements that transit be continuous and expeditious and that ships and aircraft proceed without delay.[27] In the case of archipelagic waters, the problems this may pose were addressed explicitly: the right of archipelagic sea lanes passage may be confined to archipelagic sea lanes and air routes above those lanes proposed by the archipelagic stated and adopted by the competent international organization.[28] This was not however done in the case of transit passage of straits.

The Greek Declaration

The objective problem of course remains, at least in theory. In this situation, straits states understandably may be concerned about foreign ships or aircraft using any route they wish, and perhaps about aircraft coming very close to the coast. They may well believe this is unnecessary to secure the primary purposes of transit passage. Such concerns doubtless explain the controversial interpretive declaration regarding transit passage of straits made by Greece upon signature and ratification of the UN Convention on the Law of the Sea:

> In areas where there are numerous spread-out islands that form a great number of alternative straits which serve in fact one and the same route of international navigation, it is the understanding of Greece that the coastal State concerned has the responsibility to designate the route or routes, in the said alternative straits, through which ships and aircraft of third countries could pass under a transit passage régime, in such a way as on the one hand the requirements of international navigation and overflight are satisfied, and on the other hand the minimum security requirements of both the ships and aircraft in transit as well as those of the coastal State are fulfilled.

The underlying question implicit in the Greek declaration is whether there is some way to confine ships and aircraft to particular routes through the area. In my view, the answer is a qualified "yes."

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[26] In the case of archipelagic sea lanes passage, the choice is among "routes normally used for international navigation." Law of the Sea Convention, art. 53(12).
[27] Law of the Sea Convention, arts. 38(2), 39(1)(a), 54.
[28] Law of the Sea Convention, art. 53. The International Maritime Organization is generally regarded as the competent international organization for these purposes; it is the organization to which Indonesia submitted its proposed sea lanes.

Doubtful Approaches

I do not, however, believe most of the standard explanations of how to achieve that result are particularly helpful either for legal or for practical reasons. In particular, most of the standard explanations will not, in my view, lead to a stable long-term solution.

1) The Greek declaration might be read as implying a unilateral right to designate routes. I hope this is a misreading. The UN Convention confers no such unilateral right on straits states.

2) Analogies might be made to the régime of archipelagic waters and archipelagic sea lanes. The difficulty is that, after consideration of precisely that issue, including its potential application to areas such as the Aegean, the UN Convention expressly applies the archipelagic waters régime only to states comprised wholly of islands.[29] Moreover, even that régime does not permit unilateral designation of sea lanes and air routes above them.[30]

3) The purpose of designating archipelagic sea lanes is to identify the routes through which the right of archipelagic sea lanes passage exists. That is not the purpose of designating sea lanes or traffic separation schemes in straits under article 41 of the UN Convention. The purpose of article 41 is strictly navigation safety,[31] and its application requires the approval of the competent international organization. Moreover, article 41 applies only to ships; it has no effect on aircraft in transit passage.

4) Article 45(1)(a) of the UN Convention applies only non-suspendable innocent passage, rather than transit passage, in straits formed by an island and the mainland of the same state where there is a high seas (or EEZ) route of similar convenience seaward of the island. (Among other things, this would exclude a right of overflight.) The official French and Spanish texts make clear that "mainland" means continental territory. One cannot apply this more restrictive provision between islands, or between an island and mainland of different states, or where there is no high seas (or EEZ) route of similar convenience seaward of the island. Thus, in itself, article 45(1)(a) is either inapplicable or not particularly helpful in most relevant circumstances in the Aegean Sea.

5) Pursuant to article 45(1)(b), in straits that connect the high seas to the territorial sea of a foreign state, only the régime of non-suspendable

[29] See note 18 *supra*.

[30] See note 28 *supra*.

[31] Sea lanes and traffic separation schemes may be established under article 41 "where necessary to promote the safe passage of ships." For similar reasons, *within* archipelagic sea lanes, the archipelagic state, subject to the approval of the competent international organization, may prescribe traffic separation schemes "for the safe passage of ships through narrow channels in such sea lanes." Law of the Sea Convention, art. 53(6).

innocent passage applies. (Again, among other things, this would exclude a right of overflight.) It might be argued that article 45(1)(b), rather than transit passage, provides the relevant régime for access through the Greek territorial sea to Turkish ports and territory on the Aegean Sea. In my view, this is not the most helpful or accurate analysis for several reasons.

a) Conceptually, the "strait" off a relevant part of western Anatolia divides two parts of the high seas (or EEZ) because it runs perpendicular to the Anatolian coast along a continuous territorial sea, first of Turkey and then of Greece. From that point of view, there is a right of transit passage between these two parts of the high seas (or EEZ) through a continuous strait bordered by both Greece and Turkey.

b) The definition of transit passage expressly includes "passage through the strait for the purpose of entering, leaving or returning from a State bordering the strait, subject to the conditions of entry to that State."[32] Where there is a continuous expanse of territorial sea (whether Turkish or Greek) emanating from the coast of western Anatolia that separates two parts of the high seas (or EEZ), there is a right of transit passage between those two parts of the high seas (or EEZ) and, in addition, between one part of the high seas (or EEZ) and either Greece or Turkey. This, in my view, would apply to traffic to and from Izmir, for example.

c) Moreover, there is reason to doubt whether there is, or ever will be, a strategically significant route subject in fact to the restraints of article 45(1)(b) rather than to transit passage or its equivalent. Thus, for example, in the past some people regarded the Strait of Tiran and the Gulf of Aqaba as presenting the situation addressed by article 45(1)(b); in fact, the Peace Treaty between Egypt and Israel confers a much more liberal transit right comparable to transit passage.[33] A similar question may present itself in any new peace negotiations between Iran and Iraq.

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[32] Law of the Sea Convention, art. 38(2). This is sometimes referred to as the "Singapore clause" because the Straits of Malacca and Singapore comprise a continuous strait separating two parts of the high seas (or EEZ) in a legal sense. Throughout most of their length, these straits are bordered only by Indonesia and Malaysia.

[33] "The Parties consider the Strait of Tiran and the Gulf of Aqaba to be international waterways open to all nations for unimpeded and non-suspendable freedom of navigation and overflight. The parties will respect each other's right to navigation and overflight for access to either country through the Strait of Tiran and the Gulf of Aqaba." Treaty of Peace between the Arab Republic of Egypt and the State of Israel, Mar. 26, 1979, art. V, para. 2. <http://www.mfa.gov.eg/testf.asp>.

d) Where there is a strategic route, article 45(1)(b) may simply be inadequate to give full effect to the non-enclavement principle articulated by international tribunals in maritime delimitation cases and specifically reflected in article 7(6) of the UN Convention, which prohibits the drawing of straight baselines "in such a manner as to cut off the territorial sea of another State from the high seas or an exclusive economic zone." As a textual matter, the UN Convention articulates no such rule with respect to the breadth of the territorial sea. The Convention does however prohibit abuse of right.[34] The underlying concern – which unquestionably influenced the International Court of Justice in determining the respective rights of the coastal states in the Gulf of Fonseca, for example[35] – arises from the objective situation itself, namely the problem posed by cutting off a state's access to the high seas.

e) This may illustrate a broader point. The history of the law of the sea teaches that no state, if it has a choice, will subject its vital communications links to the discretionary control of another state.

Article 36

If the answer to the question implicit in the Greek declaration is a qualified "yes," that answer may be found in article 36 of the Convention. That article provides:

> This Part [36] does not apply to a strait used for international navigation if there exists through the strait a route through the high seas or through an exclusive economic zone of similar convenience with respect to navigational and hydrographical characteristics; in such routes, the other relevant Parts of this Convention, including the provisions regarding the freedoms of navigation and overflight, apply.

What this means is that where there are high seas (or EEZ) routes of similar convenience running through the strait, the right of passage through the adjacent territorial sea is limited to innocent passage that may be suspended by the coastal state in accordance with the Convention.[37] This result is comparable to that which obtains in archipelagic waters outside archipelagic sea lanes.[38]

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[34] Law of the Sea Convention, art. 300.

[35] Case Concerning the Land, Island and Maritime Frontier Dispute (El Salvador/ Honduras: Nicaragua intervening), 1992 ICJ Rep. 352, 594, para. 395 (merits).

[36] The reference is to Part III of the Convention, Straits Used for International Navigation. (Note added.)

[37] See Law of the Sea Convention, art. 25(3).

[38] Law of the Sea Convention, art. 52.

The key to applying article 36 is to recognize that the territorial sea of a coastal state need not be the same breadth in all areas. For example, it can be three miles in some areas, six miles in other areas, and twelve miles in still other areas. Thus the breadth of the territorial sea can be fixed in certain areas so as to leave a high seas (or EEZ) route of similar convenience running through the waters comprising a strait used for international navigation.

There are several advantages to doing so. From the perspective of those with an interest in navigation and overflight through the area, the high seas freedoms of navigation and overflight are not limited to transit and its incidents beyond the territorial sea.[39] Those freedoms are secured through a route that is known and that is, by definition, of similar convenience.

From the perspective of the coastal state, the exercise of navigation freedoms by both ships and aircraft is confined to specific areas. In the territorial sea of the strait outside the high seas (or EEZ) route, there is no right of transit passage (and thus, for example, no right of overflight), and the right of innocent passage of ships is subject both to coastal state regulation and, when necessary, suspension.

The high seas routes themselves are subject to the régime of the EEZ. The duties of the flag state and the powers of the coastal state with respect to navigation safety and pollution from ships exercising the freedom of navigation in the EEZ are not substantially different from those applicable to transit passage of straits.[40] The duties of the state of registry with respect to overflight beyond the territorial sea are substantially the same as those applicable to overflight in transit passage.[41]

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[39] Transit passage is limited to transit and its incidents. See Law of the Sea Convention, arts. 38(2), 39(1)(a) & 39(1)(c).

[40] In both cases ships must comply with generally accepted international safety and pollution standards. Compare Law of the Sea Convention, art. 39(2) with Law of the Sea Convention, arts. 58(2), 94(5) & 211(2). In both cases, the establishment of routeing systems requires an IMO decision. Compare Law of the Sea Convention, art. 41 with Law of the Sea Convention, arts. 58(2) & 94(5). In both cases, the coastal state does not enjoy unilateral prescriptive competence over navigation, but does enjoy limited competence to enforce generally accepted international standards where there is a significant threat of pollution. Compare Law of the Sea Convention, art. 233 with Law of the Sea Convention, art. 221, paras. 3, 5 & 6. The right to intervene in the event of a maritime casualty beyond the territorial sea is protected. See Law of the Sea Convention, art. 221.

[41] The duties of civil aircraft and state aircraft under Law of the Sea Convention article 39(3) are drawn from high seas obligations under the Convention on International Civil Aviation, note 8 *supra*, to which virtually all states are party. See *id.*, arts. 3(d), 12. (The main difference is that there would be no express duty for state aircraft beyond the territorial sea to monitor the appropriate radio frequency; this would not appear to be a major problem, particularly in light of the general obligation of due regard for safety imposed on state aircraft by article 3(d) of the ICAO Convention.) The duties regarding the use or threat of force set forth in article

A number of straits states have refrained from extending their territorial sea in certain areas, usually to take advantage of article 36 and avoid the application of the régime of transit passage to the territorial sea in the strait. When it extended its territorial sea from three to twelve miles, Japan excluded certain straits between its islands, thereby leaving high seas (or EEZ) routes running through those straits. This approach has also been used in certain areas between Japan and Korea and between Germany and Denmark, and by Denmark, Sweden and Finland.

In most of the areas in which article 36 has been applied, the question of what constitutes a route of similar convenience through the strait is relatively simple. In the case of the Aegean, it is not simple; the legal strait dividing two parts of the high seas (or EEZ) is a continuous territorial sea formed by many islands and comprising many different routes between different islands. Whether one or more high seas (or EEZ) routes are needed depends on the particular areas with respect to which it is desired to eliminate a right of transit passage. Prudence suggests that the two coastal states, if they believe this approach merits further consideration, would consult not only with each other but with other affected states, including major maritime countries with an interest in communication through the area. Once agreement is reached on where, and to what extent, the breadth of the territorial sea needs to be restrained to produce routes of similar convenience, it should be a simple matter to devise an instrument that, among other things, binds the user states to their agreement that because freedom of navigation and overflight is guaranteed in high seas (or EEZ) routes determined to be of similar convenience, there is no right of transit passage through the territorial sea outside those routes in the area comprising the strait in a juridical sense.

CONCLUSION

It is by no means clear that delimitation of maritime boundaries between Turkey and Greece, whether by agreement or a third-party procedure, would, in and of itself, resolve the strategic problem over the long term, if at all. Those who regard delimitation as the essence of the difficulty, or who, doubtless with the best of intentions, press for third-party resolution of that issue alone, may well be missing the point. If delimitation of the maritime boundary between Turkey and Greece is the only issue, then it would seem that only by according jurisdiction to Turkey in all remaining areas could one limit the extent of the Greek territorial sea so as to leave high seas (or EEZ) routes necessary to accommodate the strategic interests of Turkey and others. Moreover, even if a tribunal were granted authority to address the question of the navigation and overflight rights of the parties in addition to the question of maritime boundaries, given the sensitive strategic, economic and environmental issues for Turkey and Greece, and perhaps other states, implicated by

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39(1)(b) repeat the obligation contained in article 2(4) of the U.N. Charter, and are themselves repeated in article 301 of Law of the Sea Convention with respect to all of the sea.

the selection of routes, it is open to doubt whether an international tribunal is in the best position to determine their location. Moreover, its judgment would not bind third states.

In a negotiated approach based on article 36, Turkey, Greece, and other interested states can consider all of the interests implicated by the selection of high seas (or EEZ) routes (and, if need be, any additional training or operating areas), taking into account all factors they consider relevant. Limiting the breadth of the territorial sea in that context need not and does not, in itself, resolve the issue of jurisdiction over resources beyond the territorial sea and the boundary delimitation question thus posed.

Agreement on different maximum breadths of the territorial sea in different parts of the Aegean Sea, including proper internationally agreed application of article 36, could be better for Turkey, for Greece, and for all interested states than any other likely solution. It recognizes that strategic concerns are at the heart of the problem, addresses those concerns directly, and promises less risk of discord and greater long term stability than the *status quo*. Once agreement is reached on the strategic aspects of the question of the breadth of the territorial sea within the framework of article 36, the scope of delimitation issues between Greece and Turkey would be largely narrowed to natural resource concerns, and might then be easier to resolve in more traditional terms through negotiation or, if need be, an international tribunal.

This is not to suggest that the process would be easy or is certain to succeed. In some sense, the underlying problem has manifested itself at various times throughout recorded history. There is no "quick fix" for such a problem. It should be approached with humility and modesty. But, precisely because article 36 of the UN Convention on the Law of the Sea addresses the objective concerns at the root of the problem, there is some reason to believe that properly prepared international consultations on the basis of that article might point the way to a more stable solution.

ASPECTS OF GOVERNANCE OF REGIONAL SEAS WITH PARTICULAR REFERENCE TO THE MEDITERRANEAN SEA

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ABSTRACT

The relationship between the Law of the Sea and the integration of Environment and Development is discussed, and the need for implementation of international agreements stressed. The situation with respect to the Mediterranean is discussed with reference to the need to achieve sustainable development and regional security. The need for a new approach to education and research is highlighted, and mechanisms suggested.

1. Background

The coast, including the adjacent land and coastal ocean has always attracted the human population. Here land, rivers, ocean, atmosphere and most human activities as well as most humans meet and interact. The processes and forces associated with this interaction are enormous. The coast is a resource in its own right which also harbours many other resources.

Through the interaction between ocean and land at the coast, good conditions are fostered for agriculture, forestry, fresh-water resources in land; for food production in the coastal waters, for transportation, trade and urbanisation. Many are the conflicts which have arisen and can arise between competing interests. Recent assessments show that the capacity of the coastal waters to cope with the waste inputs has been reached. The coast is already over-exploited in many parts, and before long the capacity of the coast around the world to cope with the growing population pressure will be surpassed. The rise of the human population from 2 to 6 billion persons over the last 50 years is indeed the major global change.

Part of the global change is the migration of populations towards the coast, the ocean. Now about 50% of the world population lives within some tens of kilometres from the ocean.

The major issues are reasonably well accepted: the habitat destruction; the over fishing; the coastal zone degradation and pollution, mainly from land-based activities; these are the major issues, for which there is an urgent need to find socially and politically acceptable solutions. The technological solutions are in many cases available.

The Third Law of the Sea (UNCLOS) and the results of the Rio Conference (UNCED) 1992, when taken together, constitute a comprehensive international environmental law. Chapter 17 of Agenda 21 comprises seven major programme areas which together spell out modes of implementation of several parts of the Law

of the Sea. The adoption of the Law of the Sea and its entering into force in 1994 has projected the comprehensive perspectives of the Ocean, beyond it being a body of water and means of transportation, by focussing attention on the life, production, resources and environmental dimension of the Ocean. The UNCED in Rio 1992 has stimulated the process of integrating the human environment into development, and has achieved involvement of practically all governments and a large number of non-governmental bodies and other mechanisms, catering also for cultural and socio-economic aspects. The role of the ocean for life on Earth and society was fully acknowledged by UNCED, and the implementation of Chapter 17 of its Agenda 21 is really part of the implementation of UNCLOS.

The Common Heritage of Mankind includes 3 aspects: economic development; conservation of resources and environment for future generations; and peace and security, through the reservation for peaceful purposes. The environment and development are included in UNCED, and peaceful uses in UNCLOS, but security is not. Hence there is now a need for incorporating the security element so as to make the framework really comprehensive.

2. The Need for Ocean Observations

Part XIII of UNCLOS establishes a regime for marine scientific research, and puts science on an equal footing with economics, law and other major sectors of society. This is extremely significant in view of the immense importance of science and technology for humankind as a whole. However, this importance of science is certainly not yet reflected in the political and governance structures of our time. UNCLOS goes far in reflecting this importance and the implementation will stimulate progress in restructuring other institutions and instruments.

The results of international co-operative ocean research over the last decades have been very substantial. Through them, together with the computer power and data assimilation technique developments, a foundation for oceanography to become operational has been established. The modelling results of ocean circulation and increased understanding of the ocean-atmosphere interaction are also very important elements in support of this.

Furthermore the global conventions and agreements resulting from UNCED 92 addressing the climate change, the biological diversity, the fisheries management, the marine pollution and the desertification issues are pushing in the direction of developing adequate global observing and warning systems. This is part of the precautionary principle. There is need for adequate data delivered in a timely and reliable fashion for forecasting and compliance monitoring uses. This is inevitable. This is also the reason for IOC pushing the development of The Global Ocean Observing System, its modules and regional components. Very considerable advances have been made since the inception of GOOS in 1989/1990. It was endorsed both by the Second World Climate Conference 1990 and by UNCED 92. It also responds to UNCLOS needs. It is co-sponsored by IOC, WMO, UNEP and ICSU.

Now, about one decade after the inception, there are operational ocean observing systems in the central Pacific, the central Atlantic, and advanced plans for the central Indian Ocean. There is a global sea level observing system (GLOSS). There are regional systems like the North East Asian Region-GOOS and the Baltic and North Sea systems. The Mediterranean system is under development, and so are parts of a system for the Black Sea. EuroGOOS is a most important regionally unifying initiative. Regional forecasting centres are being established and data handling systems for other data then the classical ones are put in place. WOCE has played a large role here; as well as the IODE system and its experiences. Now there is a need to make people use the data and the results and the potentials! This is now our challenge, to penetrate into the user community and governments and decision making community, and private industry. This must be done if progress is to be maintained and benefits to be shared, by all!

3. The International Ocean Institute

The International Ocean Institute was formally established in 1972. In the 1970's and early 1980's the IOI primarily acted as a think-tank mechanism for various ideas regarding the development of the Law of the Sea, in support of the on-going negotiations. Later, the training programme for the Law of the Sea was established. The IOI participated in UNCED 92 and related preparatory work, and implemented a broad training programme involving UNCLOS and UNCED results in the 1990's. The IOI is thus endeavouring to respond to part of the capacity building needs.

The achievement of proper ocean governance is a major objective of the IOI. The work of IOI in this field is based on the comprehensive international environmental law which is in place through the United Nations Convention on the Law of the Sea in combination with the results and agreements coming out of UNCED 1992 and the related follow-up processes. A central theme of IOI is the application of the Common Heritage of Mankind principle.

In order to achieve the objective the IOI mission is focussed on education, training and research so as to enhance the peaceful uses of ocean space and its resources, their management and regulation as well as the protection and conservation of the marine environment.

Apart from development of human resources, the IOI system is involved in other development and capacity building issues, addressing:

> Poverty eradication; generation of self-reliant development in local coastal communities; resources management, development of eco-friendly technologies and use of traditional environmental knowledge; co-development and co-management with some focus on integrated coastal area management; sustainable livelihoods; mitigation of and adaptation to natural hazards, e.g. cyclones, storm-surges; empowerment of developing country communities to manage their coastal and EEZ resources.

Problems of coastal communities are addressed in an integrated way, with social, economic, environmental and survival aspects all taken into account in community driven projects, guided by IOI Centres in co-operation with local NGO's, and in consultation with local and national authorities as required. The approach involves co-management and Sustainable Livelihood considerations. The innovative part lies in addressing the links between social, survival, economic and environmental needs, in a balanced fashion. This goes beyond integrated coastal area management. An IOI model is emerging.

The IOI network currently consists of 16 Centres and a Headquarters of 1 Executive Director and 3 other staff located in Malta. The Centres are established through agreements with their Host institutions. These are universities or other research and technical institutions, including natural, social, economic, legal sciences.

4. The Mediterranean

Despite all the work that has been done in the Mediterranean since the 70's, much remains to be achieved. This includes the establishment of sustainable development, addressing regional security issues and creation of a regional enforcement and surveillance mechanism. It was with this in mind that the International Ocean Institute organised a 2 day seminar on Mediterranean Basin-wide Co-development and Security, in Malta in September 2000. The aim was to stimulate the regional co-operative process. The seminar considered the problem in four inter-related areas: (i) Sustainable development and the implementation of the GPA; (ii) technology co-development and partnership; (iii) sustainable development of two basin-wide actions: tourism and fisheries; and (iv) integration of sustainable development and regional security.

From the elaboration's the following emerged:

(i) GPA

Although progress has been made in several regions on the GPA implementation process, it appears that the Mediterranean region has advanced the most through the mechanisms of the Barcelona Convention and the Mediterranean Action Plan, with the secretariat provided through UNEP, based in Athens, Greece.

Land-based sources provide for more than 80% of the total pollution load in the Mediterranean. This has led to the Barcelona Convention contracting parties to take several actions, indicated as follows(UNEP, Athens 1999).

The signature in 1996 by the Contracting parties to the Barcelona Convention of the amended Protocol for the protection of the Mediterranean Sea against pollution from land based sources and activities (LBS) is a milestone in the history of the Mediterranean Action Plan (MAP), as it sets the legal framework for a concrete and realistic progression to land based pollution assessment and control.

In the spirit of this change, one of the major breakthroughs initiated by the signature of the LBS Protocol is the commitment by the Contracting Parties to formulate and adopt a Strategic Action Programme (SAP) of national and regional activities for the elimination of pollution derived from land-based activities. The SAP was prepared by MAP as part of the MEDPOL Programme in close consultation with Mediterranean experts, and was adopted by the Contracting Parties in Tunis in November 1997. The Programme also represents the translation at the regional level of the principles and objectives of the Global Programme of Action (GPA) to address pollution from land-based activities, adopted in Washington in 1995. The adoption of the SAP, and the intention to initiate the implementation of activities even before the entry into force of the amended LBS protocol, clearly shows a new and more positive attitude by the Contracting Parties towards a concrete elimination of pollution from land-based sources.

Hotspots have been identified and Governments concurred on this; they have accepted to provide information on hotspots. Considerable progress has been made through MEDPOL, control of dumping and oil spills, and transportation of dangerous goods. However, MARPOL 73/78 is not sufficiently implemented. As regards GPA-LBA only about 50% of waste water is treated before release into the sea. However, the distribution is very uneven; the situation with river inputs is not well controlled. There is a strong need for a legal basis of control and enforcement of agreements. In those cases where a legal instrument exists the situation is better than in other cases. There is still no protocol on ICAM in the Mediterranean. We need a legal basis for control of the impacts of land-based activities. In accordance with the Barcelona Convention the contracting parties must report on actions they have taken.

The LBS protocol of 1996 is now ratified by 8 countries. There is a need for national control through an inspectorate and for training of inspectors. The urbanisation, the rivers, agriculture are the main sources of concern. With a contribution form GEF of about 6 million USD the implementation of the SAP is now initiated. However, there is a need for about 6 billion USD for satisfactory implementation in dealing with identified hotspots. A regulatory system should include: inspections; compliance surveillance; and sanctions. The institution must be built with an inspectorate and inspectors with training. The technology transfer also needs to be part of this. From 1999 a global network of inspectorates exist and the Mediterranean is a partner in this.

How can the national implementation of the GPA-LBA be strengthened? Via regional cooperation through the regional seas programme if it can be revitalised; via enhancing public awareness and political pressure; through links to sectoral and economic interests such as tourism, and building of a related financial institutional mechanism, and including a funding mechanism as part of the National Plan.

The significance of regional cooperation has grown, but it should be integrated and inter-sectoral. The implementation of the GPA should also be used to trigger the revitalization of the Regional Seas Programme of UNEP. It was a great

success in 1970's but was sector-oriented. An inter-sectoral approach is now required. The NGOs can advocate the coupling or correspondence to the national level co-management approach which is intersectoral and involves all "stakeholders". The regional level should be seen as a counterpart to this national model – and a mutual reinforcement should be developed through the participatory mechanisms embedded in the Mediterranean CSD.

(ii) Technology co-development

Today's technology is knowledge – and information-based: it cannot be "bought" and "transferred"; it has to be "learned". It is far less resource-intensive, because, the more effective it gets, the smaller it grows("miniaturization"). It calls for an ongoing relationship between the "producer" and the "consumer;" the "consumer" gets involved in the product design, and has to learn, often through extensive training, the use of the technology, its maintenance, repair and upgrading. "Producer" and "consumer" in a way are merged in what Alvin Toffler has called "the prosumer" in an ongoing joint undertaking for the duration of the product. The longer this duration, the higher will be the "utilization value" of the product, which becomes more of a "process" than a "product" in the old sense.

The only effective method of "technology transfer" in this new phase of industrial revolution is the joint venture between "prosumers" in research and development. Such joint ventures have become an important component of the new industrial system within and among industrialized States. In the LOS Convention, the "Enterprise" for sea-bed mining is to come into existence through "joint ventures".

Joint ventures in R & D between companies of industrialized States and developing States do not happen spontaneously, however, and where they do happen, between a strong and weak partner, they usually work out in favour of the stronger partner and constitute just another form of exploitation. Even among industrialized countries, an institutional framework is needed to stimulate these joint undertakings and steer research in the desired direction. In Europe such an institutional framework has been created and given rise to quite a series of a kind of joint R & D ventures (e.g. EUREKA and EUROMAR). This type of joint ventures in R & D, was highly successful and widespread in the Eighties, but has been overtaken by the wave of "mergers" in the Nineties. In the present context, with regard to regional seas and involving developed as well as developing countries, the EUREKA model seems still viable.

It is proposed that this kind of institutional framework , with the necessary variations from region to region, could be adapted and linked to the emerging mechanisms for the implementation of the GPA within the Regional Seas Programme. And it could serve the closely interrelated needs of UNCLOS and all UNCED92 instruments.

The GPA calls for the establishment of "focal points" in each State party to a Regional Seas Programme. The responsibility of the "focal point" is to assist with

the implementation of the GPA within the State concerned. Within this "focal point" the position of a "national technology coordinator" should be established. It would be the responsibility of the national technology coordinator to encourage, solicit and select the best projects required for environmentally and socially sustainable development. The whole network of local communities, private and public sector industries and academic and technical institutions should be involved in proposing projects. In particular, local ("indigenous") persons possessing traditional knowledge and skills should be encouraged to participate; their participation would enhance the development of "eco-technologies", i.e., the blending of traditional, culturally acceptable, and modern technologies. To be eligible, projects would have to satisfy two additional criteria: (1) they would have to fall within the categories of technology on the priority list agreed on regionally; (2) they must be conducted by partners in at least two countries, at least one of which must be a developing country.

The national technology coordinators should meet as often as necessary, probably at least twice a year, within the framework of the Regional Seas Programme to refine the project selection at the regional level and prepare a list for submission to the meeting of Ministers.

A necessary meeting of Ministers would (a) be responsible for agreeing on a list of priority categories of technologies for the region, such as, technologies making fisheries more sustainable, including selective gear, processing technologies, post-harvest conservation, waste recycling, or sewage treatment; industrial applications of genetic resources; sea-bed mining or industrial symbiosis; the list would have to be revised from time to time; and (b) they would be responsible for the final selection of projects.

Selected projects would be funded, partly by the companies and institutions that had proposed them, partly by their governments, and partly by regional development banks, the GEF and other multilateral or bilateral donor institutions. The proportions would vary from region to region.

(iii) Two Basin-wide actions: tourism and fisheries

A Maltese study presented at the seminar was the first of its kind; it had taken 2-3 years to complete, based on established PAP/RAC guidelines. The study set out to establish a sustainable development strategy for the industry for the coming 10 years. The study provides for much data and information on public concerns. A number of development scenarios were analyzed: status quo; decline; limited, or unlimited growth. The importance of the tourism sector is brought out as follows: 25% of GNP; 1/3 of country employment.

At the same time 80% of the sewage is untreated; 60% of 10,500 interviewed persons considered transport inadequate. The report concludes that high season (summer) volumes of tourism at present have reached saturation, and growth must therefore take place in the off-peak and winter period. That is, the limited growth scenario is recommended. The main conflict emerges as being social, in

terms of society's tolerance levels of high population densities and visitor satisfaction levels, resulting from saturation being reached. This was shown in survey responses from the peak season: over crowded, high beach use, too much traffic, highly urbanized situation, and an over-riding problem of high population density levels.

The tourism discussion highlighted various aspects of this industry associated with the country, which caters for about 0.8% of the total load of foreign visitors to the Mediterranean basin annually. Considering the area of Malta relative to the whole this number indicates the uneven distribution of tourism in the region.

Such a pattern was also brought out in the fisheries presentation. Most of the fisheries occurs in waters under national jurisdiction, and although the extension to a 200 mile Exclusive Economic Zone as envisaged under the Law of the Sea has not been implemented, there is a tendency for national fisheries zones to be extended beyond 12 mile territorial seas in some countries; up to 50 miles in Spain. The fisheries is also concentrated in the northern part of the basin, just as the tourism is. There has been a high level of investment in the fisheries sector, leading to over-capacity and over-fishing, and this is in part a consequence of the high price of fish. This has been driven to very high levels in the Mediterranean, being the globally highest outside Japan, and here the demand from tourism has probably played a part.

There was an increase in fishery landings from the 1960's to the end of the 1980's, and later, also in the eastern parts of the region which is difficult to explain as a result of increased fishing effort alone. This increase may be related to an enhancement of the biological productivity through increased availability of nutrients. This may in turn be due to increased nutrient inputs from catchment basins as well as from the sea through variabilities in the circulation patterns. The increased fish production is particularly noticed in small, low price pelagic species.

There is a tendency towards sub-regionalisation and the fisheries management through the GFCM is difficult, since member states have not found a common format for agreement. There are also growing tensions. In the Mediterranean the North Sea model of fisheries management cannot be applied because of many fisheries for multiple species, but largely because of the predominant role of many and varied local fisheries, quota management would be infeasible.

There is presently a trend moving back towards management of small-scale artisanal-type fisheries, with local ownership, and especially controls on fishing effort and access. The diversity of fishing vessels, gear and species all point towards a sub-regional management need. The FAO Code of Conduct for Responsible Fisheries should be applied, but since almost all the small pelagic and demersal/shellfish stocks can be regarded as straddling inside and outside of territorial seas, this means that the UN Fish Stock Agreement for straddling and highly migratory resources also applies. It is perhaps the uncertainty as to what legal regime applies outside of territorial waters that is leading to the pressure to extend national fisheries zones further from shore, or at least to the edge of the continental shelf.

Attempts to apply ecosystem management have so far not been sufficiently pursued. This approach, however, seems to provide the best hope for the future, incorporating the use of marine protected areas where ecosystem sensitivity to human intervention exist. Aquaculture is also growing in the Mediterranean. There is thus a need for zonation of these and other human activities so as to avoid conflicts. This leads to the need for a GIS type planning of coastal zones using the ICAM approach. There is no protocol for ICAM in the Mediterranean. The use of marine protected areas and eco-tourism are potentially important tools for preserving ecosystems, but appear not to be feasible solutions in areas of high tourist influx, since they are unlikely to coexist with high usage. There is also a trend to migration of fishers towards the north from the South Mediterranean to work in agriculture and fisheries, and their earnings play an important role in the hard currency inputs to southern Mediterranean countries.

Many potential conflicts emerge not only as regards the distribution of the fisheries and the competition between industrial, artisanal/local fisheries, and aquaculture, but also with respect to zonation and conflicting uses and consumption of seafood. Local populations will soon not be able to afford to eat local, fresh seafood. Conflicts are also related to coastal areas and habitat destruction and by pollution influencing the quality of water and marine foods.

(iv) Integration of sustainable development and regional security

The concept of Common Heritage includes 3 aspects: economic development; conservation of resources and environment for future generations; and peace and security, through the reservation for peaceful purpose. The United Nations split the concept, allocating "peaceful uses" to UNCLOS III, and the security aspect to the Disarmament committee in Geneva. UNCED 92, following the UNCLOS approach, emphasized the integration of economic development and the conservation of the environment in the concept of "sustainable development" but forgot about security and peace. In view of the rising wave of crime, armed robbery, piracy, Illegal, Unreported, Unregulated Fisheries (IUUF) and other forms of noncompliance with regulations and conventions, together with the migration to the sea, the time has come to re-integrate the peace and security aspect of the Common Heritage concept. The new emphasis on implementation and enforcement makes it inevitable.

In the post-Cold-War climate, this can best be achieved at the regional level. The UN Agenda for Peace stresses the importance of regional co-operation in peace-keeping and peace-building. Although not mentioned in the Agenda, which is almost entirely land-oriented, the Regional Seas institutions correspond entirely to the type of organizations described by the Agenda which should take up these activities.

The disappearance of global threats of armed conflict has encouraged scholars as well as the military to rethink the "mission" of navies, and thus the last few years have seen an increasing number of studies of so-called joint or integrated maritime enforcement. An effective national system of integrated maritime

enforcement, including the peaceful uses of the navy with capabilities of surveillance, monitoring and control would be basic for regional integrated marine enforcement.

In the Mediterranean such a move could be linked to the MCSD, by bringing in the Ministries of Defense together with the other Ministries and Departments involved in ocean affairs. This would constitute a possible institutional mechanism for the integration of sustainable development and regional security. It is recommended that a study be made to define more precisely the jurisdiction, the tasks, constraints, limitations, operational aspects and control of such an enforcement mechanism. It was suggested that IOI, in cooperation with colleagues from Maltese institutions could carry out such a study. Several participants expressed their willingness to contribute. The study should aim at the preparation of a pilot model for a protocol on regional integrated maritime enforcement comprising environmental, economic, as well as political security.

The Black Sea situation highlights that comprehensive security is a fundamental issue in that region. Poverty, i.e., the lack of economic security, in large parts of the Black Sea region is of great concern.

The role of monitoring and surveillance in the enforcement effort is very important. The development of systematic observations is now being pursued, and when operationally in place, will provide essential baseline information in near real-time. Satellite remote sensing can provide surface layer observations not only of environmental parameters and ocean and coastal fisheries, but also of moving ships and crafts, and trace them. The development of a Mediterranean forecasting system, facilitating enforcement through surveillance, compliance control and early warning, is being put in place through regional cooperation in the Med GOOS programme.

The root cause of most of the problems is poverty, generated by the uneven distribution of almost everything. There thus is a need for sharing, redistribution and solidarity. Without this component, there can be neither sustainable development nor security. Therefore all sectors of society, as represented in the MCSD, should participate from the outset in the making of integrated enforcement policy. This will facilitate the required dialogue.

Addressing the integration of comprehensive security and sustainable development requires the cooperation, coordination and exchange of information among various international programmes and institutions, to deal with the interactions between ocean, atmosphere and land and freshwater systems. Hence the Global International Water Assessment (GIWA) effort should be borne in mind and contacts should be established accordingly. The Mediterranean basin could serve as a pilot experiment.

The GPA Intergovernmental Review process, culminating in 2001, and the Rio + 10 process, gearing up to a world conference in 2002, were seen as providing most propitious opportunities for advancing this integrative effort. The implementation of the GPA is considered one trigger for the revitalization of the Regional Seas Programme of UNEP, which could be utilized for the integration of sustainable development and regional security.

The recent establishment of the United Nations Informal Consultative Process on the Ocean and the Law of the Sea (UNICPOLOS), with its comprehensive and interdisciplinary composition and its emphasis on implementation and enforcement was seen as a stimulus for the establishment of similar integrative processes at the regional and national level through community-based co-management systems. The success of UNICPOLOS requires consistence and coherence in decision-making throughout the whole system of ocean governance, from the local and national, through the regional to the global level.

5. Needs for research, education and public awareness

Studies at the coastal zone as a resource in its own right must be pursued. Impacts of many uses on that zone, of pollution, aquaculture, population pressure must be further studied and quantified. The natural hazards as well as food safety associated with aquaculture, sanitation and sewage disposal, freshwater contamination, constitute increasingly serious national security issues in many countries. The global change potential is also generating increasing risks and uncertainties of great concern for the coastal areas, and in particularly many small islands and low-lying countries.

Regions of coastal seas are forced both locally and remotely by oceanic, atmospheric, bottom and terrestrial interactions. Responses to forcings and internal dynamical instabilities generate over a broad range of scales many phenomena, including waves, tides, fronts, filament, plumes, stratification, water masses and ice formations and transformations, turbulence and mixing. These phenomena occur with varying strength in different regions. Regions can be different or similar with respect to the mix of coastal phenomena that are present.

The migration towards the ocean, the coastal urbanization, the change of economic paradigm to a service economy, and the concern for global change, all has led to a current focus on the land-sea interface, the coast and the ocean, the ocean services and economics, the need for a related education and appropriate mechanism to achieve that, including the necessary enhancement of awareness and participation. The ocean is also really our last resource to help address poverty and inequality.

In order to address elements of the problem the International Ocean Institute proposes a new education and training mechanism in the form of a network of education, training and research centres with expertise in ocean, coastal and marine-related affairs and governance, joined together in a partnership to provide an interdisciplinary and comprehensive coverage of ocean related subjects, taking into account cultural and social factors. We call this mechanism the International Ocean Institute Virtual University.

The need for restructuring of higher education is felt globally. As in international law and organization, or in economic thinking, it is likely that the peculiar nature of the ocean environment and its resources may be most suitable for a pilot project for an innovative approach to the sharing of knowledge as a Common Heritage of Mankind.

The VU concept does not just mean to go internet, but is rather a structure and approach by which the educational activities and programmes of the IOI Network of Operational Centres and of their Host institutions can be combined into one focused mechanism and purpose, and also coupled with activities of other academic centres of excellence, to provide a truly international and interdisciplinary curriculum.

Co-operation is sought with relevant institutions, and co-sponsorship has been confirmed by the United Nations University, UNESCO and its IOC, the World Maritime University, and UNCTAD.

In short, the IOIVU is an open-ended, expanding network of autonomous institutions, clustered around the initial nucleus of IOI Operational Centres and their Host institutions. The whole system is designed as a contribution to the realization of the goal of creating a new order of peace and human security, economic and social development and environmental conservation for the ocean and the world, as envisaged by the Law of the Sea, 1982 and the great Earth Summit of Rio de Janeiro, 1992. Students enrolling in the IOIVU will not only improve their own knowledge and their career opportunities, they will, at the same time, contribute to the vital cause of creating a better world for their children.

THE ADRIATIC SEA AND UNCLOS: THE CROATIAN MARITIME CODE AND LEGAL REGIME OF ITS EXCLUSIVE ECONOMIC ZONE

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ABSTRACT

The questions related to the succession of Croatia with respect to international conventions, especially to the 1958 and 1982 conventions on the law of the sea, are discussed in the introductory part of the paper. The next chapter refers to some of the relevant provisions of the second part of the Maritime Code with the title "Maritime and Submarine Areas of the Republic of Croatia". Since the exclusive economic zone has not yet been proclaimed by the Parliament of Croatia, though its regime is envisaged in the Maritime Code, a special chapter contains the analysis of various legal aspects of the future Croatian EEZ in the Adriatic Sea. The main problems regarding maritime delimitations between the Croatian maritime areas and those of its neighbouring states in the Adriatic Sea are discussed in the final part.

HISTORICAL BACKGROUND

After becoming an independent state ten years ago, the Republic of Croatia, for the first time in its history, had an opportunity to create its own legislation related to maritime affairs. The former Yugoslavia used to pass the legislation regulating the law of the sea in separate Coastal Sea and Continental Shelf Acts (1948, 1965 and 1987), whereas the maritime law was regulated in the Maritime and Inland Waters Navigation Act (1977), which entered into force on 1 January 1978. Having gained independence in 1991, Croatia passed a bill that enabled the application of this former federal law during the three-year period before the Croatian Parliament passed the Maritime Code. This was done in 1994 and it was the first time that Croatia has codified its maritime law and law of the sea in a single legislative act.

Regarding the international conventions, the disintegration of Yugoslavia raised various questions concerning the succession of Croatia and other new states, in order to determine which of the international conventions were still to be binding for them, and which states necessitated prior notification in order to maintain their status of party to the treaty following the succession. The dilemma concerning the binding rules of the international law is caused in the first place by the fact that the Vienna

Convention on the Succession of States in Respect of Treaties (1978) has not entered into force.[1]

However, some rules on succession are generally considered as customary law: one of these is the rule that international agreements determining boundaries and territorial regimes concluded by predecessor state remain binding between successor states and other parties.[2] On the other hand, the Vienna Convention in its Article 36 contains special provisions for the treaties that are not in force. Thus, after the dissolution of a state which was a party of such a treaty, the successor state has an option to become its party by notifying its depositary. This means that the Vienna Convention, contrary to its rules regarding treaties in force, does not provide for *ipso jure* continuation and the successor states are not bound by multilateral treaties not in force at the moment of succession, unless their notification of succession is given to the depositary.[3] At the time of the dissolution of Yugoslavia (8 October 1991), as well as during the following three years (until 16 November 1994), the UNCLOS belonged to this group of treaties. The former Yugoslavia had ratified it in 1986 and had become a party to it, but after its dissolution none of the successor states, including Serbia and Montenegro (The Federal Republic of Yugoslavia), did not notify the depositary of the Convention (The United Nations) on their continuation in this respect.

However, as of 22 May 1992 Croatia became a full member of the United Nations, and consequently a full member of all the other UN specialized organizations and bodies. Concerning the international conventions on the law of the sea, Croatia first became party to the three 1958 Geneva Conventions (on 14 November 1992),[4] at the same time following the developments related to the 1982 LOS Convention. After the conclusion of the Informal Consultations of the Secretary General which resulted in the adoption of the Agreement Relating to the Implementation of Part XI of the Convention on 28 July 1994 and the subsequent entry into force of the UNCLOS on 16 November 1994, Croatia decided to become a party to both treaties and deposited the related notification with the Secretary General of the United Nations on 5 April 1995. The Resolution of the Government of Croatia concerning the succession to the UNCLOS and the accession to the Agreement contains a peculiar provision stating its retroactive function - declaring that the Republic of Croatia has been a party to the UNCLOS since its independence (8 October 1991).[5]

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[1] 22 August 1978, 17 I.L.M. 1488.

[2] The 1978 Vienna Convention confirms this rule in its articles 11 and 12.

[3] SERŠIĆ, M., 1994. The Crisis in the Eastern Adriatic and the Law of the Sea, Ocean Development and International Law, 24: 291-299, at p. 293.

[4] The Croatian translations of the three Geneva Conventions (Convention on the High Seas, Convention on the Territorial Sea and the Contiguous Zone, and Convention on the Continental Shelf) were published on 2 December 1994 in the Official Gazette of the Republic of Croatia, International Agreements, no. 12/1994.

[5] The Official Gazette of the Republic of Croatia, International Agreements, no. 11/1995.

THE MARITIME AND SUBMARINE AREAS OF CROATIA

The Maritime Code of the Republic of Croatia was adopted by the Parliament on 27 January 1994.[6] It is a comprehensive legal act consisting of 1056 Articles, divided into 13 chapters. Chapter II of the Maritime Code, dealing with maritime and submarine areas, is of a particular interest. The provisions of this chapter regulate the Croatian sovereignty, its sovereign rights and jurisdiction in internal waters, its territorial sea, continental shelf and exclusive economic zone. The analysis of these provisions leads to the conclusion that not only is the Croatian national legislation on the law of the sea based on 1958 Geneva Conventions on the Law of the Sea to which Croatia became a party through succession, but it is also based on all those provisions of the 1982 Convention which were considered customary international law in the period before its entry into force (i.e. the rules relating to the territorial sea and the continental shelf which are different from the 1958 Conventions, Part V of the UN Convention which deals with EEZ etc.).

The Maritime Code has abandoned the term "coastal sea" (comprising the internal waters and the territorial sea) which was used in previous legislation, because its wording was inadequate and unknown in the terminology of the international law of the sea. Article 7 of the Maritime Code regulating internal waters adopted the system of straight baselines from the previous legislation of the former Yugoslavia that had left the islands of Biševo, Jabuka, Svetac and Vis outside this system. Some commentators expressed the opinion that Croatia should have seized this opportunity to extend its straight baselines to these islands in accordance with Article 7 of UNCLOS.[7]

In accordance with the previous legislation as well as with the international law of the sea Article 19(1) of the Maritime Code established a 12 mile territorial sea measured from the baselines. On the other hand, the Maritime Code contains certain provisions which have been adopted by many coastal states, although they have not been generally accepted either in international conventions on the law of the sea or in the international customary law. The examples of such provisions are Article 23 which requires notification of innocent passage of a foreign military vessel at least 24 hours in advance and Article 27 which puts a limit of a maximum of three military vessels of the same nationality entering the territorial sea. These provisions do not apply to the operations resulting from the Security Council decisions based on Chapter VII of the UN Charter.

Furthermore, a foreign fishing vessel at passage through the territorial sea of the Republic of Croatia shall not engage in fishing unless it has been issued a licence, and it shall sail at a speed of not less than six knots, without stopping or anchoring

[6] The Official Gazette of the Republic of Croatia no. 17/1994.

[7] VUKAS, B., 1996. Croatia and the Law of the Sea. In: VUKAS, B. (ed.), Essays on the New Law of the Sea 3, Institute for International and Comparative Law, Faculty of Law, University of Zagreb, 26: 13-21, at p. 17.

except if it is absolutely necessary as a consequence of force majeure or of an accident at sea, and carrying visible marks of a fishing vessel.[8]

While sailing in the internal waters and during innocent passage through the territorial sea of the Republic of Croatia, military vessels, tankers, nuclear ships, and ships carrying dangerous chemicals or noxious substances shall sail following the prescribed routes for these ships, observe the systems of separated traffic in the areas where these traffic lanes or systems of separated traffic are prescribed, and satisfy any other prescribed conditions regarding the safety of navigation and the prevention of the pollution of the marine environment.[9] Article 25 prescribes that systems of compulsory sea lanes and traffic separation schemes shall be marked in the navigation map "Jadransko more" (The Adriatic Sea) and be gazetted in due time in the "Notices to Mariners".

The continental shelf of the Republic of Croatia is defined in Article 43 of the Maritime Code as "seabed and subsoil beyond the outer limit of the territorial sea of the Republic of Croatia seaward, up to the boundary lines of the continental shelf with the neighbouring states." These boundaries and others are described and discussed in the final chapter.

LEGAL REGIME OF THE CROATIAN EXCLUSIVE ECONOMIC ZONE

The Maritime Code in its Chapter VII (Articles 33-42) contains regulations on the EEZ. However, coastal states do not have *ipso facto* an exclusive economic zone (unlike the territorial sea and continental shelf) without a special act of proclamation. Because of various political reasons, the former Yugoslavia, although having ratified the UNCLOS, had never proclaimed its EEZ and neither has Croatia since gaining its independence. This means that provisions of Chapter VII will apply only after the Parliament of Croatia has decided to proclaim its EEZ.[10]

With the proclamation of its exclusive economic zone on the basis of UNCLOS and the Maritime Code, Croatia would acquire the sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural marine resources, as well as for production of energy from the water, currents and winds. Naturally, before proclaiming its EEZ Croatia should provide sufficient financial means and trained personnel in order to determine, on the basis of the best available scientific evidence, the optimum utilization of the living resources, the total allowable catch and its possible surplus. In accordance with the principles of contemporary fisheries management, Croatia should establish measures which would ensure that various species in the Adriatic Sea are not overexploited. The collected data, especially the statistics concerning the catch, should be regularly exchanged with other states through competent international organizations.

[8] Article 26 of the Maritime Code.
[9] ibidem, Article 28.
[10] Article 1042 of the Maritime Code contains such provision.

After the proclamation of the Croatian EEZ, the foreign fishermen will have access to the living resources of that area of the Adriatic according to the agreements which will be concluded on the basis of Part V of the UNCLOS, while the legal nature of their present activities is the freedom of fishing in the high seas contained in the Article 87 of the Convention. The most important agreement would be the one with Italy, since the fishermen from the Italian eastern coasts have been traditionally oriented towards those parts of the Adriatic Sea which will become the EEZ of the Republic of Croatia. Similar agreements would probably be negotiated with the neighbouring countries like Slovenia and Bosnia-Herzegovina, and also with the Central European countries in the Croatian hinterland, which enjoy the special status of landlocked states or geographically disadvantaged states on the basis of Articles 69 and 70.

However, the Maritime Code should enumerate the list of conditions for access of the foreign fishermen to the surplus catch, taking into account all the relevant circumstances, like traditional presence of those fishermen in certain areas of the Adriatic or the cooperation of the countries in fishing industry and other sectors.

Having in mind that Croatia is a country in transition, which has also been recovering from the consequences of the recent war, it is understandable that the decision to proclaim its EEZ is influenced by various economic considerations. Besides all the advantages which Croatia would acquire from its EEZ, it must be ready to bear significant expenses which are necessary for the monitoring and enforcement of the regulations in the EEZ. First of all, Croatia should establish its Coast Guard capable of efficient control of the maritime area with a surface which will be more than twice of its territorial sea. This means not only the acquisition of a sufficient number of patrol ships and aircraft, but also the training of qualified personnel. As for the type of control, it would probably be more convenient to determine the size and the total number of ships with limited periods they may spend fishing, than to determine the fishing quotas which would require additional expenses of both setting up the system and its adequate control.

Croatia will have to dedicate special attention to the straddling fish stocks and highly migratory species which will occur within its EEZ and the adjacent areas with the status of either the high seas or the future EEZ of other Adriatic countries which might proclaim them (Albania, Italy and Montenegro). All these states will have to reach an agreement, directly or through an appropriate regional organization, regarding coordination of the measures necesary for conservation and optimal utilization of these stocks.

The Maritime Code contains provisions regulating the rights of foreign nationals and corporations to engage in marine scientific research in the Croatian EEZ. Such research will be approved by the Ministry of Maritime Affairs if its purposes are peaceful and if it represents a contribution to the scientific understanding of the marine environment. The conditions required for such approval and the reasons for its denial shall be prescribed by the Minister in a special act. Such act should also regulate the duty to provide detailed information concerning the scientific project, the right of Croatian scientists to participate in the research, the duty to submit the results of the research to the Croatian authorities and to publish the final results, the duty to remove

the equipment after the completion of the research, the possible causes for suspension of marine scientific research and the enforcement measures, including the fines for non-compliance.

As a maritime country with long tradition, Croatia must promote international cooperation in the field of marine scientific research between Croatian oceanographic institutes and those in other Mediterranean countries. This requires legislation which will regulate the transfer of technology and technical cooperation between Croatia and other states and international organizations, especially concerning education, training and exchange programmes.

The Article 42 of the Maritime Code prescribes the duty of the foreign vessels which navigate through the Croatian EEZ and foreign aircraft in overflight to comply with the international and national rules and regulations regarding the prevention of the marine pollution from ships, air or by dumping. This provision does not interfere with the freedoms of navigation and overflight, which will remain unchanged regarding the sea lanes and air corridors in and above the central areas of the Adriatic Sea as they themselves change the status from high seas to exclusive economic zones of Croatia and other countries. Although international rules and standards concerning the marine pollution have supremacy over national laws, there is a need for domestic legislation on measures of prevention, control and enforcement of environmental regulations in the EEZ. Croatia will have to establish special agencies for the purpose of monitoring its EEZ, pollution analysis and environmental impact assessment, using the best scientific methods. Results will be published and directly exchanged with other countries through appropriate international organizations.

THE MARITIME BOUNDARIES OF CROATIA

Having gained their independence in October 1991and becoming the subjects of international law, Croatia and Slovenia declared the necessity of drawing a boundary line which would divide their territorial waters by mutual agreement. Whereas both states agreed to strictly apply the rules of customary and conventional international law - especially those rules contained in the Geneva Convention on the Territorial Sea and Contiguous Zone and the UN Convention on the Law of the Sea - they could not agree on their interpretation and implementation. In its 7 April 1993 Memorandum, Slovenia claimed its sovereignty over the entire Bay of Piran, and consequently, their jurisdictions arising thereof should be exercised by the Slovenian authorities.

Since the Republic of Croatia is also a coastal state in the Bay of Piran, the Slovenian claim is not only unacceptable for Croatia but moreover, it is a violation of Article 1 of the Geneva Convention and Article 2 of the UN Convention. Both provisions contain the rule that the sovereignty of a coastal state extends, beyond its land territory and its internal waters (and archipelagic waters in UNCLOS) to an adjacent belt of sea, described as the territorial sea, and to the airspace over the territorial sea as well as to its bed and subsoil. If accepted, the Slovenian request would put Croatia in a position unknown until now in the whole world: to have a foreign state's sovereignty in the territorial sea in front of the Croatian coast.

The second claim in the above mentioned Memorandum is the request that the territorial sea of Slovenia must have contact with the high seas, which would be contrary to the delimitation provisions from the Geneva Convention and the UNCLOS. That is why Croatia declined this claim, but on the other hand, proposed a solution consisting in the establishment, by bilateral agreement, of a new very liberal *sui generis* regime in specified parts of the Croatian territorial sea. This regime, with some elements of the transit passage envisaged by the UNCLOS for similar situations in international straits, should ensure the freedom of navigation beyond the regime of innocent passage. The Slovenian delegation has not accepted this proposal and so far has refused to submit the dispute to an international judicial forum (the International Court of Justice in the Hague, the International Tribunal for the Law of the Sea in Hamburg or international arbitration).

On the other side, the delimitation of maritime boundaries between Croatia and Montenegro (The Federal Republic of Yugoslavia) will represent even more serious problems. Since the dissolution of Yugoslavia, Serbia and Montenegro have been expressing territorial pretensions towards the most southern part of Croatia, before, during and after their military operations culminating in the occupation of Croatian territory and the siege of Dubrovnik. They have insisted on the total control of the entrance of the Bay of Boka Kotorska which became the base for the entire Navy of the former Yugoslavia.. After the end of the hostilities and the subsequent withdrawal of the Yugoslav Army from the southern part of Croatia, an interim arrangement created a demilitarized zone with the UN peace-keepers stationed in the area of the Prevlaka, the peninsula belonging to Croatia, at the entrance of the Bay.

Croatia should not admit the existence of any territorial dispute with Montenegro (FRY) and insist on the application of the *uti possidetis* principle, because the former land boundaries between the ex-Yugoslav Republics "became frontiers protected by international law."[11] "According to a well-established principle of the international law the alteration of existing frontiers or boundaries by force is not capable of producing any legal effect", so that "they may not be altered except by agreement freely arrived at."[12] The only dispute to resolve is the one concerning maritime delimitation between Croatia and Montenegro (FRY). It involves the delimitation of territorial seas in the Bay of Boka Kotorska and outside it, up to the 12 miles from the nearest point on baselines. There are no special circumstances or historic titles in this case which could demand the delimitation in a way at variance with the median line. The second maritime delimitation is the one regarding the continental shelf. In this case the Maritime Code also provides for the median line: "Until the conclusion of an agreement concerning the delimitation of the continental shelf with Montenegro, or with the Federal Republic of Yugoslavia (Serbia and Montenegro), the Republic of Croatia shall enjoy the sovereign rights in that zone up to the median line proceeding seaward from the outer limit of the territorial sea…"

[11]The Opinion no. 3 of the Arbitration Commission of the Conference on Yugoslavia of 11 January 1992, International Legal Materials, 31, p. 1499.
[12] ibidem.

There are two treaties concerning maritime boundaries negotiated between Italy and the former Yugoslavia which are still in force because of the above mentioned binding effect of delimitation agreements in the case of succession of states.

The delimitation of the territorial seas between Italy and Yugoslavia in the Bay of Trieste was settled by the Osimo Treaty of 10 November 1975. Both states agreed to take into account "the principles resulting from the Geneva Convention on the Territorial Sea and the Contiguous Zone".[13] It means that the delimitation of the territorial sea between the two countries was made applying the median line corrected by one of the special circumstances, namely, the necessity to enable the navigation through the territorial waters of each state to the respective ports of Trieste and Koper. This delimitation negotiated in Osimo today represents the boundaries of the territorial sea between Italy and Slovenia, and between Italy and Croatia.

Another treaty that remained in force because of succession is the Rome Agreement of 8 January 1968 between Italy and the former Yugoslavia which had determined the boundary line of the continental shelf in the Adriatic.[14] It entered into force on 21 January 1970. The above mentioned Article 43 of the Maritime Code in its second paragraph contains a reference to this Agreement. The delimitation was effectuated in accordance with the Article 6 of the 1958 Convention on the Continental Shelf which contains the combined rule of equidistance and special circumstances. Although the boundary line was basically the median line between the two opposite coasts, the presence and position of certain islands (Jabuka, Palagruža and Galijula) caused a compromise during the negotiations which resulted in the departure from the median line, conceding to Italy certain areas as a compensation. Jabuka was used as a basepoint but its full impact was offset by shifting the notional median line eastward, conceding to Italy an area of 1680 km2. A special provision was made for natural deposits straddling the boundary, and both parties agreed to proceed, with regard to such deposits, by mutual agreement.[15]

The Republic of Croatia has the right to proclaim its exclusive economic zone on the basis of the UNCLOS 1982. Thus, the Maritime Code in its Article 33 prescribes that the EEZ of Croatia will encompass the maritime and submarine areas seaward from the outer limits of its territorial sea up to the outer limits of the EEZ allowed by general international law. However, having in mind that Italy is the opposite coastal state in the Adriatic Sea, it is obvious that Croatia cannot proclaim the maximum breadth of 200 miles envisaged by the 1982 Convention. Therefore, once that coastal states proclaim their exclusive economic zones in the Adriatic Sea, Croatia will have to negotiate with Italy and Montenegro (FRY) in order to reach bilateral agreements concerning the boundaries of the respective exclusive economic zones. The future lateral EEZ boundary with Montenegro will probably be determined through negotiations or arbitration together with the delimitation of other maritime

[13] The Official Gazette of SFRY, International Agreements, no. 1/1977. The treaty entered into force on 3 April 1977.
[14] The Official Gazette of SFRY, International Agreements, no. 28/1970, p.231.
[15] Article 2 of the Agreement.

areas (territorial sea and continental shelf). On the other hand, the delimitation of the future opposite EEZ boundary between Croatia and Italy should not be difficult, since there is no obvious reason why the boundary line from the above mentioned 1968 Rome Agreement between Italy and Yugoslavia on the delimitation of the continental shelf (which is binding for Italy and Croatia on the basis of succession) should not also constitute the boundary line for the EEZ which would follow the agreed coordinates and, starting from the seabed, extend vertically in order to encompass the water column and the surface of the sea.

Actually, the Rome Agreement is a treaty envisaged by the Article 74(4) of the UNCLOS: "When there is an agreement in force between the States concerned, questions relating to the delimitation of the exclusive economic zone shall be determined in accordance with the provisions of that agreement." Thus, a single maritime boundary would be determined for both the EEZ and the continental shelf.

CONCLUSIONS

During the first decade of its independence, Croatia has become a party to the most important international treaties dealing with the law of the sea, either through succession or accession. In the meantime, the Maritime Code of 1994 codified not only the Croatian maritime law but also the law of the sea, incorporating many provisions from those international conventions. Still, there are many problems which have remained unresolved. Besides the resolution of the maritime boundary disputes with its neighbours, the most important issue on the Croatian agenda regarding the law of the sea, is the proclamation of its exclusive economic zone. The decision for this will depend on various political, economic and social circumstances, but mostly on reaching a common standpoint with Italy and other neighbouring states in the Adriatic Sea, with the coastal states of the Mediterranean and with the European Union. Anyhow, the Maritime Code contains the necessary legal framework when such time comes.

Having proclaimed its EEZ, Croatia will be entitled to establish measures regarding the protection of the marine environment, conservation and management of the natural resources of a significant part of the Adriatic Sea. The rights and duties of Croatia will include the determination of the total allowable catch of the living resources and of their maximum sustainable yield based on results of scientific research. National scientific centres and oceanographic institutes should be intensively developed and actively involved in cooperation with foreign centres and international organizations. As the joint research projects and exchange of the scientific data are exceptionally important, Croatia will undoubtedly allow and encourage the access of the foreign scientists and institutions to its future EEZ under the conditions prescribed by the UNCLOS and other sources of the international law.

All coastal states of the Adriatic must dedicate their policy and economic resources towards the protection of their common legacy. The EEZ is a perfect instrument which the UN Convention has envisaged for such a task. Therefore, one of the first sub-regional agreements among the Adriatic countries after the proclamation

of their exclusive economic zones, should be an agreement concerning the common environmental protection and pollution prevention of the Adriatic Sea. These states must also continue to cooperate with other Mediterranean states and further develop the system of the environmental protection of our entire region within the framework of the Barcelona Convention created twenty-five years ago.

REFERENCES

BARIĆ-PUNDA, V., 2000. The Exclusive Economic Zone of the Republic of Croatia. In: KNEŽEVIĆ, I. (ed.), The Paneuropean Shipping Conference, Croatian Paneuropean Union, Split, 185-190.

BLAKE, G., TOPALOVIĆ, D., 1996. The Maritime Boundaries of the Adriatic Sea, University of Durham, 66 p.

DEGAN, V.D., 1995. Maritime Frontiers of the Republic of Croatia, Uporedno pomorsko pravo, 37(1-4): 7-38.

FARAJ, A.A., 1993. The International Law of Maritime Boundaries and the Practice of States in the Mediterranean Sea, Clarendon Press, Oxford, 415 p.

IBLER, V., 1985. The Importance of the Exclusive Economic Zone as a Non-Resource Zone. In: VUKAS, B. (ed.), Essays on the New Law of the Sea, Institute for International and Comparative Law, Faculty of Law, University of Zagreb, 21: 118-140.

METELKO, J., 1988. Equity and Maritime Delimitation Problems in the Mediterranean. In: VUKAS, B. (ed.), The Legal Regime of Enclosed or Semi-enclosed Seas: The Particular Case of the Mediterranean, Institute for International and Comparative Law, Faculty of Law, University of Zagreb, 2: 185-222.

RUDOLF, D., BARIĆ-PUNDA, V., 2001. About the Lateral Sea Boundaries in the Bays of Piran and Boka Kotorska. In: KNEŽEVIĆ, I. (ed.), The Second Paneuropean Shipping Conference, Croatian Paneuropean Union, Split, 34-44.

SERŠIĆ, M., 1994. The Crisis in the Eastern Adriatic and the Law of the Sea, Ocean Development and International Law, 24: 291-299.

SERŠIĆ, M., 2000. The Exclusive Economic Zone in the Adriatic. In: POŽAR-DOMAC, A. (ed.), Responsible Coastal Zone Management -The Challenge of the 21st Century, Period biol, 102(1): 173-180.

VUKAS, B., 1985. The LOS Convention and Sea Boundary Delimitation, In: VUKAS, B., (ed.). Essays on the New Law of the Sea, Institute for International and Comparative Law, Faculty of Law, University of Zagreb, 21: 147-185.

VUKAS, B., 1996. Croatia and the Law of the Sea. In: VUKAS, B. (ed.), Essays on the New Law of the Sea 3, Institute for International and Comparative Law, Faculty of Law, University of Zagreb, 26: 13-21.

CURRENT PROBLEMS IN THE MEDITERRANEAN SEA

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To examine the current problems of the Mediterranean Sea means to analyse the national legislation of all the States of this area and to try to make comparison with other States belonging to other seas similar to our sea.

I- National legislation: The Hesitation of States

Do the Mediterranean States benefit enough from the new law of the sea and from the Convention of 1982? Any contention needs to be based on evidences which are difficult to provide. So we can say:

1) On territorial sea:
The majority of Mediterranean States modified their legislations and adopted 12 nautical miles as the breadth of their territorial sea.
This is a benefit, but is it really significant? I have some doubt.

2) Fishing areas:
There are two kinds of fishing areas:
a) The tradition areas with a historical origin like the fishing areas of Gulf of Gabes (Tunisia). In 1982, Tunisia had declared, before the signature of the Convention, that the regime of this zone is similar to the regime of EEZ provided for in the Convention. It's a strange coincidence.
b) The new zones:
Algeria and Malta had created new fishing areas limited in their breadth. They pretend that the declaration is a provisional measure; one day they shall claim an EEZ in conformity with the Convention.

3) EEZ:
No State from the Mediterranean Sea has decided yet to create an EEZ; Egypt and Croatia announced their intention to do so; but the real decision still pending. This strange position does not exist for other countries belonging to other regions similar to the Mediterranean Sea (Caribbean Sea, Baltic and Black Sea). Nevertheless, Spain decided to put an end to this situation. It does not use the term EEZ, it prefers the term "Protected area". But the aim is clear, it is in fact an EEZ minus something, the scientific research is not included.

II. "Droit Comparé" and common action:

A) In the Caribbean Sea, Baltic and in the Black Sea, the States concerned succeeded to benefit very well from the Convention and protected the interest of their populations. So, they succeeded to decide the following:
- territorial sea: breadth 12 nm for each State
- EEZ : generalization of the declarations.
- PC: 350 nm some States
- Archipelagic States: many States are declared archipelagic specially in the Caribbean Sea.

B) In the Mediterranean Sea, it is necessary to mention a happy initiative.

- The Conference of Barcelona of 1976 was an exceptional opportunity to deal with the difficult problem of pollution and the different remedies adopted to protect the environment.
- On fishing, the action of FAO is beneficial.
- There is also a good action for the protection of the archaeological and historical objects found at sea.

CONCLUSION

Spain opened the door closed by the countries of the North. The security considerations and the need for caution about the "cripping juridiction" are not now an obstacle against the extension of the EEZ. The future could confirm what is just said.